Guide to Massachusetts BerryDunn MITA 2.0 Deliverables

Key:

BCM – Business Capability Matrix

TCM – Technical Capability Matrix

SSP – State Specific Process

As Is – <u>Current</u> state of business and technology operations

To Be – Desired <u>future</u> state of business and technology operations

The deliverables have a consistent numbering convention in that deliverable letters correspond to a specific agency

- **A.** = DDS
- **B.** = DMH
- **C.** = DPH

Description of Deliverables

Deliverable Number	Deliverable Description
1A – DDS Goals	Strategic, Organizational, Programmatic/Service Delivery, Quality and Next Generation System Goals as defined by DDS
1B – DMH Goals	Strategic, Organizational, Programmatic/Service Delivery, Quality and Next Generation System Goals as defined by DMH
1C – DPH Goals	Strategic, Organizational, Programmatic/Service Delivery, Quality and Next Generation System Goals as defined by DPH
1D – Consolidated	Consolidated Goals across all three agencies
3A – DDS SSP MM	MITA Maturity Model for state specific processes performed at DDS
3B – DMH SSP MM	MITA Maturity Model for state specific processes performed at DMH
3C – DPH SSP MM	MITA Maturity Model for state specific processes performed at DPH
4 3A – DDS BCM To Be	Matrix of DDS Business Processes To Be matured over a 2-5 year horizon
4 3B – DDS BCM To Be	Matrix of DMH Business Processes To Be matured over a 2-5 year horizon
4 3C – DDS BCM To Be	Matrix of DPH Business Processes To Be matured over a 2-5 year horizon
4 4A – DDS TCM To Be	Matrix of DDS Solutions To Be matured over a 2-5 year horizon to support the business processes
4 4B – DDS TCM To Be	Matrix of DMH Solutions To Be matured over a 2-5 year horizon to support the business processes
4 4C – DDS TCM To Be	Matrix of DPH Solutions To Be matured over a 2-5 year horizon to support the business processes
6A – DDS BCM	Current/As Is MITA maturity level of business processes performed at DDS
6B – DMH BCM	Current/As Is MITA maturity level of business processes performed at DMH
6C – DPH BCM	Current/As Is MITA maturity level of business processes performed at DPH
7A – DDS TCM	Current/As Is MITA maturity level of technical solutions in use at DDS
7B – DMH TCM	Current/As Is MITA maturity level of technical solutions in use at DMH
7C – DPH TCM	Current/As Is MITA maturity level of technical solutions in use at DMH

Commonwealth of Massachusetts
Executive Office of Health and Human Services

Next Generation System Planning Project

Deliverable 1A

Goals Document for DDS

Version 1.0

June 30, 2011

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Deliverable 1A

Goals Document for DDS

Table of Contents

Revision History:

Version	Delivered Date	Update Reason
v1.0	June 30, 2011	Initial submission to the State.

1. Description of the Goal Setting Process

BerryDunn conducted a three step process to document the primary Department of Developmental Services (DDS) goals. First, DDS was provided a Goals Questionnaire with the intent of capturing the primary Strategic, Organizational, Programmatic/Service Delivery, Quality and Information Technology Goals. Additionally BerryDunn requested feedback on the agency's vision and IT goals for the Next Generation System. While DDS was reviewing this questionnaire, BerryDunn took on a parallel process, and through research, review of the agency's website, and the team's prior experience working with state DD agencies, developed additional goals for Massachusetts DDS's consideration.

Once DDS submitted feedback on the Goals Questionnaire, the BerryDunn DDS Team reviewed both the questionnaire and the BerryDunn suggested goals, and added a new category related to funding. BerryDunn then compared the two goal documents, and identified similarities, differences and general themes among both documents. The result was to transform the universe of goals into a combined draft Goals Document, which was delivered to DDS for review prior to the first Goals Review work session on June 14, 2011.

At in-person work sessions on June 14, 2011 and June 23, 2011, BerryDunn facilitated a review of the draft Goals Document with DDS staff. DDS brought together cross functional agency staff, central office and field managers, and Regional and Area Directors from each region to discuss and evaluate the goals. BerryDunn has incorporated the DDS feedback into this final Goals Document draft.

2. Department of Developmental Services Mission Statement

The Mission Statement of the Department of Developmental Services is as follows:

"The Department is dedicated to creating, in partnership with others, innovative and genuine opportunities for individuals with intellectual disabilities to participate fully and meaningfully in, and contribute to, their communities as valued members. DDS strives to support individuals with intellectual disabilities in the least restrictive environment while providing flexible and expanded opportunities for the highest level of choice and self-direction to the individuals and families we support."

3. Department of Developmental Services Goals

Below are the goals that DDS approved during the Goals work sessions. These goals are organized by category and some goals may cross categories but they are only shown once. The categories are: Strategic, Organizational, Programmatic/Service Delivery, Quality, Next Generation System and Funding.

GOAL CATEGORY: STRATEGIC

Source ID	Goal
DDS-STR01	Support individuals with intellectual disabilities in the least restrictive environment while providing flexible and expanded opportunities for the highest level of choice and self-direction to the individuals and families we support.
DDS-STR02	Enhance collaboration between DDS, DDS providers and consumers and their families.
DDS-STR03	Enhance collaboration with other State agencies, such as MassHealth, MRC, DMH and DCF.
DDS-STR04	Promote ease of access to the agency's intake and eligibility process for DDS services.

GOAL CATEGORY: ORGANIZATIONAL

Source ID	Goal
DDS-ORG01	Implement the Community First program, de-institutionalizing individuals from nursing facilities and state residential facilities and building a strong residential infrastructure to manage all residential needs for all populations including individuals turning 22 prioritized for residential and other special populations.
DDS-ORG02	Ensure that individuals supported by DDS have choice of service delivery, provider and residential setting. And, building a strong self-direction service delivery model.
DDS-ORG03	Ensure effective management structure and processes to support DDS programs, providers, funding, human resources, and service capacity.
DDS-ORG04	Strengthen DDS processes for measuring and improving individuals' satisfaction with DDS and its programs and services.

GOAL CATEGORY: PROGRAMMATIC/SERVICE DELIVERY

Source ID	Goal
DDS-PG01	Build and implement employment programs that will meet the needs of individuals supported and provide a greater sense of empowerment and accomplishment.
DDS-PG02	Build a stronger Assistive Technology program, e.g. customized wheelchairs and other technology that enables individuals with disabilities to live more independently.
DDS-PG03	Ensure quality homes, quality employment programs, and self-direction (consumer-directed opportunities within service delivery).
DDS-PG04	Enhance sustainable and affordable residential options that meet the individuals' needs, such as shared living.
DDS-PG05	Continue to successfully provide and enhance all family support services across the Commonwealth.
DDS-PG06	Effectively manage needs of people turning 22, consumers newly eligible and individuals with changing needs in light of limited new resources, including maximizing MassHealth State Plan services such as Day Habilitation and Adult Foster Care.

GOAL CATEGORY: QUALITY

Source ID	Goal
DDS-Q01	Ensure survey and certification process determines all homes and programs surveyed by OQE are in substantial compliance with OQE regulations (Office of Quality Enhancement).
DDS-Q02	Implement revised ISP process that is more person-centered.

GOAL CATEGORY: NEXT GENERATION SYSTEM

Source ID	Goal
DDS-NXG01	Continue to meet all federal and state standards and requirements around the use of technology, such as HIPAA, privacy, security and disaster recovery.
DDS-NXG02	System will ensure data quality and integrity based on business logic and workflows.
DDS-NXG03	Enhance reporting infrastructure and capabilities for internal and external reporting.
DDS-NXG04	DDS system of record needs to be interoperable with all partners and legacy systems.
DDS-NXG05	Utilize technology to enhance the efficiency and effectiveness of the DDS workforce, wherever they work.
DDS-NXG06	Improve data extraction and analytics for decision-making purposes.

GOAL CATEGORY: FUNDING

Source ID	Goal
DDS-F01	Maximize federal reimbursement under autism waiver, adult residential waiver, community living waiver, and the adult support waiver by: • increasing the number of individuals receiving waiver services; • maintaining eligibility, enrollment and delivery of supports and services that meet individuals' assessed needs; • ensuring compliance with waiver assurances as required by CMS; and • ensuring compliance with waiver claim checks.
DDS-F02	Implement Chapter 257 rates for services.
DDS-F03	Maximize Targeted Case Management (TCM) revenue by ensuring all CMS required documentation is complete.

4. Conclusion

DDS continues to focus on supporting individuals with intellectual disabilities in the least restrictive environment while providing flexible and expanded opportunities for the highest level of choice and self-direction to the individuals and families they support. DDS is also interested in leveraging its effective management structure and processes to support DDS programs, providers, funding, human resources, and service capacity.

Both DDS and BerryDunn have had time to review one anothers' ideas, have shared respective feedback, and have worked mutually toward the final definition of each of these goals.

Commonwealth of Massachusetts
Executive Office of Health and Human Services

Next Generation System Planning Project

Deliverable 1B

Goals Document for DMH

Version 2.0

July 14, 2011

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Deliverable 1B

Goals Document for DMH

Table of Contents

Revision History:

Version	Delivered Date	Update Reason
v1.0	June 30, 2011	Initial submission to the State.
v2.0	July 14, 2011	Revised based on feedback from the State.

1. Description of the Goal Setting Process

BerryDunn sent the Department of Mental Health (DMH) a Goals Questionnaire with the intent of capturing the primary Strategic, Organizational, Programmatic/Service Delivery, Quality, Funding and Next Generation System Goals. Starting with documents provided by DMH and through research, review of the agency's website, and the team's prior experience working with state MH agencies, the BerryDunn DMH team developed additional goals for Massachusetts DMH's consideration. A combined draft Goals Document was delivered to DMH for review prior to a goal setting work session on June 14, 2011.

At the June 14th work session BerryDunn facilitated a review of the draft Goals Document with DMH staff. DMH brought together a team of agency staff representing various functions to discuss and evaluate the goals. BerryDunn has incorporated the DMH feedback into this Goals Document draft.

2. Department of Mental Health Mission Statement

The Mission Statement of the Department of Mental Health is as follows:

"The Department of Mental Health, as the State Mental Health Authority, assures and provides access to services and supports to meet the mental health needs of individuals of all ages, enabling them to live, work and participate in their communities. The Department establishes standards to ensure effective and culturally competent care to promote recovery. The Department sets policy, promotes self-determination, protects human rights and supports mental health training and research. This critical mission is accomplished by working in partnership with other state agencies, individuals, families, providers and communities."

3. Goals

Below are the goals that DMH and BerryDunn identified during the facilitated work session. These goals are organized by category and some goals may cross categories but they are only shown once. The categories are: Strategic, Organizational, Programmatic, Quality, Funding and Next Generation System. The numbering of goals within a category is not to indicate priority; just sequence.

GOAL CATEGORY: STRATEGIC

Source ID	Goal
DMH-STR01	Provide/support a system of care that is recovery-oriented, person-centered and supports consumer choice and community living by taking steps to hold our contractors and ourselves accountable and to include consumers and families in policy development.
DMH-STR02	Strengthen DMH oversight process as a purchaser of services to promote and monitor service delivery that is recovery-oriented, person-centered and supporting of consumer choice as well as ensuring consumer health and safety.
DMH-STR03	Ensure access to quality services that utilize evidence based and promising practices that support recovery and community tenure and improve utilization of State hospital beds by decreasing length of stay.
DMH-STR04	Support staff by promoting learning, developing a highly qualified and culturally competent staff, and expanding the peer workforce.
DMH-STR05	Support an environment in the DMH service system that promotes physical health and wellbeing in partnership.
DMH-STR06	Promote research and best practice to help DMH fulfill its role as the State Mental Health Authority.
DMH-STR07	Effectively carry out role of State Mental Health Authority beyond promoting research and best practices.
DMH-STR08	Ensure effective management structure and processes to support DMH programs, providers, funding, human resources, and service capacity.
DMH-STR9	Standardize business, performance management and clinical processes across DMH to ensure effective fiscal, programmatic and quality management practices throughout the Department.

GOAL CATEGORY: ORGANIZATIONAL

Source ID	Goal
DMH-ORG01	Enhance collaboration and partnership with other agencies and the community.

GOAL CATEGORY: PROGRAMMATIC / SERVICE DELIVERY

Source ID	Goal
DMH-PG01	Assure that services are provided and planned in collaboration with clients, are individualized, and are delivered in the least restrictive, clinically appropriate environment. Services should be age and developmentally appropriate and based on evidence based practices/best practices.
DMH-PG02	Support and improve harm reduction and risk management practices.
DMH-PG03	Develop working relationships with other relevant community organizations and natural supports to help facilitate clients leading full lives in the community with the support networks of their choosing.
DMH-PG04	Implement a system that provides for data to be collected to support key performance indicators.
DMH-PG05	Utilize decision support systems to inform policy and planning and to promote continuous quality improvement.

GOAL CATEGORY: FUNDING

Source ID	Goal
DMH-FND01	Maximize federal reimbursement by creating interoperability between DMH and other systems.
DMH-FND02	Meet all HIPAA standards for proper Revenue Cycle Management including: Eligibility, authorizations, billings, electronic payments and claims status.

GOAL CATEGORY: NEXT GENERATION SYSTEM

Source ID	Goal
DMH-NXG01	Establish a comprehensive, integrated healthcare information system solution that addresses all operational aspects for the facility and community- based service areas (and includes an EHR), as well as the administrative/payor aspects for DMH and a requirement for the solution to operate and be maintained in the Commonwealth of Massachusetts regulatory environment.
DMH-NXG02	Use technology to make work more efficient, reduce staff work load and improve patient outcomes.
DMH-NXG03	Achieve clinical and programmatic data integration through Health Information Exchange (HIE), DMH Electronic Health Record (EHR), and other means.
DMH-NXG04	Develop reporting and data analytics capabilities to support billing, service utilization management/review and quality management.

4. Conclusion

DMH continues to focus on delivering services that are effective, recovery-oriented, person/family centered and supportive of consumer choice and community living. The agency needs an integrated information system that supports client care by providing quality information in a usable and timely format. DMH is also interested in leveraging its effective management structure and processes to support DMH programs, providers, funding, human resources, and service capacity.

Commonwealth of Massachusetts
Executive Office of Health and Human Services

Next Generation System Planning Project

Deliverable 1C

Goals Document for DPH

Version 1.0

June 30, 2011

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Deliverable 1C

Goals Document for DPH

Table of Contents

Revision History:

Version	Delivered Date	Update Reason
v1.0	June 30, 2011	Initial submission to the State.

1. Description of the Goal Setting Process

BerryDunn sent the Department of Public Health a Goals Questionnaire with the intent of capturing the primary Strategic, Organizational, Programmatic/Service Delivery, Quality and Next Generation System Goals. Through research, review of the agency's and hospitals' website, and the team's prior experience working with Public Hospitals, the BerryDunn DPH team developed a draft Goals Document for Massachusetts DPH for each of the hospitals' consideration. The draft Goals Document was delivered to DPH and each facility in advance of goal setting work sessions which were held on June 7, 8, 9, 13 and 15, 2011.

At each work session, BerryDunn facilitated a review of the draft Goals Document with DPH staff. DPH brought together teams of agency staff representing various functions to discuss and evaluate the goals. BerryDunn has incorporated the DPH feedback into this final Goals Document draft. Further updates or feedback received from DPH will be reflected in a final draft of this document.

2. Department of Public Health and Public Health Hospitals' Mission Statements

Department of Public Health Mission Statement
"Helping people lead healthy lives in healthy communities."

Tewksbury Hospital Mission Statement:
"To provide comprehensive treatment, care, and comfort to adults with chronic medical and mental illnesses."

Western Massachusetts Hospital Mission Statement:
"To be a caring hospital community which provides affordable, quality healthcare services that enable patients to reach and maintain their highest physical, mental and spiritual well-being."

Lemuel Shattuck Hospital Mission Statement:
"To deliver compassionate medical and psychiatric care to patients requiring multi-disciplinary treatment and support which promotes their health, well-being, rehabilitation and recovery."

The Massachusetts Hospital School Mission Statement:
"To provide medical, habilitative, rehabilitative, recreational, educational and vocational services to children and young adults with multiple disabilities, assisting them to achieve their maximum level of independence in all aspects of life."

3. Goals

Below are the goals that DPH and BerryDunn identified through the Goals work session. These goals are organized by category and some goals may cross categories but they are only shown once. The categories are: Strategic, Organizational, Programmatic/Service Delivery, Quality, Next Generation System and Funding.

GOAL CATEGORY: STRATEGIC

Source ID	Goal
DPH-STR01	Increase inpatient capacity to meet demonstrated needs of the community by providing a continuum of acute, behavioral health and long term care, expanded niche services/outpatient capacity, and enhanced nursing specialties.
DPH-STR02	Integrate and collaborate with public agencies to meet the health care needs of their clients and the Commonwealth's residents.

GOAL CATEGORY: ORGANIZATIONAL

Source ID	Goal
DPH-ORG01	Sustain retention and recruitment gains for all staff.
DPH-ORG02	Increase efficiency and reduce redundancy.
DPH-ORG03	Provide innovative, evidence-based service and deliver patient care of outstanding quality.
DPH-ORG04	Enhanced statewide understanding of IT needs opportunities and demands facing all facilities and organizations that deliver services.
DPH-ORG05	Increase productivity.
DPH-ORG06	Integrated facility maintenance and property management systems including adopting equipment management RFID technology to manage clinical assets.
DPH-ORG07	Support the success of health care reform by maximizing health care quality and reducing health care costs.
DPH-ORG08	Promote wellness and reduce chronic disease.
DPH-ORG09	Reduce health disparities by promoting health equity.
DPH-ORG10	Strengthen local and State public health capacity.

GOAL CATEGORY: PROGRAMMATIC/SERVICE DELIVERY

Source ID	Goal
DPH-PG01	Enhance continuity of care between inpatient and community services, including follow-through with outpatient care, in order to achieve more successful discharges for patients and support community first placements in the appropriate care setting.
DPH-PG02	Bedside medication administration to support the "5 R's" (1. Right patient 2. Right time and frequency of administration 3. Right dose 4. Right route of administration 5. Right drug).
DPH-PG03	Maximize opportunities in Ambulatory Care Clinics, especially Primary Care, to achieve public health goals of reducing health disparities and promoting patient wellness.
DPH-PG04	Explore correctional system needs with public safety agencies to provide palliative and skilled nursing care for aging or terminally ill inmates.
DPH-PG05	Integrated, clinical focused pharmacy distribution and administration system.

GOAL CATEGORY: NEXT GENERATION SYSTEM

Source ID	Goal
DPH-NXG01	Integrate Computerized Physician Order Entry (CPOE) and Clinical Decision Support systems into clinical practice (including Laboratory and x-ray) concurrent with SOPS installation of a replacement Pharmacy Information System that interfaces with the electronic medical record (Meditech) and automated dispensing systems (Pyxis).
DPH-NXG02	Maximize electronic access to current paper-based processes that facilitates patient flow efficiencies, care plan management, data retrieval and data trending and supports evidence based real-time clinical decision support, and standards compliance, (e.g., medication reconciliation, consent forms).
DPH-NXG03	Implement EMR modules that fully support outpatient services, surgical services and case management functions not available in current Meditech product.
DPH-NXG04	Increase interoperability and transparency within all systems (e.g. Human Resource Division Systems, Pharmacy, and other hospital information systems).
DPH-NXG05	Maximize the secure use of wireless technology to promote bedside efficiencies, care process improvements and internet information access.
DPH-NXG06	Develop metrics and system(s) to measure clinical productivity on a real-time basis.
DPH-NXG07	Integrate system into the spectrum of clinical care data with business operations data (e.g., MMARS financials, HRCMS payroll and labor activity) to produce real-time management information, such as daily dashboard metrics, ability to develop departmental and service budgets, and measure costs/revenues by cost centers, such as nursing units or clinical service/departments.
DPH-NXG08	System must support training, education, clinical competency, licensing and professional development credentials and interface with benefits, payroll, time and attendance scheduling (responsive to bargaining unit agreements and a 24/7 operation), financial data, utilization management and operational data.
DPH-NXG09	Archive clinical documentation, meet interoperability and meaningful use standards of the National Coordinator for HIT and facilitate querying for real-time business analysis.
DPH-NXG10	Improve access to data, improve data quality, timeliness and transparency and achieve data integration.

Source ID	Goal
DPH-NXG11	Improve the use of technology to better manage programs, increase/track productivity, support data analytics, and track patient outcomes.
DPH-NXG12	Receive and transmit referrals and relevant patient data electronically (including telemedicine capabilities).
DPH-NXG13	Strategize with correctional health systems the design and implementation of electronic medical records and data exchanges at prison and jail sites that ensures multi-agency interoperability with LSH lab, radiology, other clinical and UR data.

GOAL CATEGORY: QUALITY

Source ID	Goal
DPH-Q01	Maintain patient safety.
DPH-Q02	Develop compliance measurement algorithms that track appropriate documentation frequency and issues auto-reminders when additional medical record documentation is necessary.

4. Conclusion

DPH hospitals operate unique programs and they need integrated information systems that promote patient/client care by providing quality information in a usable and timely manner. This information system must support patient care quality, provide feedback and include internal controls to help the agency/facility to manage scarce resources.

Both DPH and BerryDunn have reviewed and collaborated on ideas, shared respective feedback, and have worked mutually toward the final definition of each of these goals.

Commonwealth of Massachusetts
Executive Office of Health and Human Services

Next Generation System Planning Project

Deliverable 1D

Consolidated Goals Document

Version 2.0

July 14, 2011

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Deliverable 1D

Consolidated Goals Document

Table of Contents

Revision History:

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v1.0	June 30, 2011	Initial submission to the State.
V2.0	July 14, 2011	Revised based on feedback from the State.

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1. Description of the Goal Setting Process

BerryDunn sent the Department of Developmental Disabilities (DDS), Department of Mental Health (DMH) and Department of Public Health (DPH), a Goals Questionnaire with the intent of capturing the primary Strategic, Organizational, Programmatic/Service Delivery, Quality and Next Generation System Goals for each Agency.

Using feedback received from the agencies in response to the Questionnaire and through research, review of the agency's websites, and the team's prior experience working with similar agencies the BerryDunn DDS, DMH and DPH teams developed draft Goals documents for the various agencies' consideration. The draft Goals document was delivered to each agency in advance of agency-specific and facility-specific goal setting work sessions which were held on June 7, 8, 9, 13, 14 and 15, 2011. A separate meeting was held with the Executive Office of Health and Human Services (EOHHS) on June 16, 2011.

The Goals Questionnaire and goal setting work sessions were focused on identifying Agency goals which aligned with MITA goals and objectives:

MITA Goals

- Develop seamless integrated systems that effectively communicate through interoperability and standards.
- Provide an environment that supports flexibility, adaptability, and rapid response to changes in programs and technology.
- Promote an enterprise view that supports enabling technologies aligned with Medicaid business processes and technologies.
- Provide information that is timely, accurate, usable, and accessible to support decision making for health care management and program administration.
- Provide performance management measurement for accountability and planning.
- Coordinate with public Health and integrate health outcomes with the Medicaid community.

MITA Objectives

- Adopt data and industry standards.
- Promote secure data exchange.
- Promote reusable components through modularity.
- Promote efficient and effective data sharing to meet stakeholders' needs.
- Provide a beneficiary-centric focus.
- Support interoperability and integration using open architecture standards.
- Promote good programmatic practices.
- Support the integration of clinical and administrative data to enable better decision making
- Break down artificial boundaries between systems, geography, and funding (with the Title XIX program).

At each goal setting work session, BerryDunn facilitated a review of the draft Goals Document with agency staff. Each state agency brought together teams of staff representing various functions to discuss and evaluate the goals. BerryDunn has incorporated feedback from the

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DDS, DMH, DPH and EOHHS work sessions into this Goals Document draft. Further updates or feedback received from any of the agencies will be reflected in the June 30 iteration of this document.

2. Agency Mission Statements

The Mission Statement of the <u>Department of Developmental Services</u> is as follows:

"The Department is dedicated to creating, in partnership with others, innovative and genuine opportunities for individuals with intellectual disabilities to participate fully and meaningfully in, and contribute to, their communities as valued members. DDS strives to support individuals with intellectual disabilities in the least restrictive environment while providing flexible and expanded opportunities for the highest level of choice and self-direction to the individuals and families we support."

The Mission Statement of the <u>Department of Mental Health</u> is as follows:

"The Department of Mental Health, as the State Mental Health Authority, assures and provides access to services and supports to meet the mental health needs of individuals of all ages, enabling them to live, work and participate in their communities. The Department establishes standards to ensure effective and culturally competent care to promote recovery. The Department sets policy, promotes self-determination, protects human rights and supports mental health training and research. This critical mission is accomplished by working in partnership with other state agencies, individuals, families, providers and communities."

The Mission Statement of the <u>Department of Public Health</u> is as follows:

"Helping People Lead Healthy Lives In Healthy Communities"

3. Goals

Below are the goals that DDS, DMH, DPH, EOHHS and BerryDunn identified through the Goals work session. These goals are organized by category and some goals may cross categories but they are only shown once. The categories are: Strategic, Organizational, Programmatic/Service Delivery, Quality, Next Generation System and Funding. Within each category, the sequencing of goals do not indicate specific priority and like goals are grouped together. Each goal serves as a guide for understanding the improved business and organizational capabilities desired by each participating agency. Finally, goals dealing with employees, as opposed to clients and providers, are listed last.

GOAL CATEGORY: STRATEGIC

Source ID	Goal	DDS	DMH	DPH	EOHHS
STR01	Integrate and collaborate with different agencies to be responsive and meet health care needs of Commonwealth residents.	X	X	X	X
STR02	Use technology to make work more efficient and reduce staff work load and improve patient outcomes.	X	X	X	X
STR03	Enhance collaboration between agency, providers and consumers and their families.	X	X		
STR04	Promote ease of access to the agency's intake and eligibility process for services.	X			
STR05	Standardize business, performance management and clinical processes across DMH to ensure effective fiscal, programmatic and quality management practices throughout the Department.		X		
STR06	Increase capacity to meet the needs of the community and provide continuum of care to acute care, behavioral health and long term care patients, expand niche services and outpatient capacity and enhance nursing specialties.		X	X	
STR07	Provide/support a system of care that is recovery-oriented, person-centered and supports consumer choice and community living by taking steps to hold our contractors and ourselves accountable and to include consumers and families in policy development.		X		
STR08	Strengthen DMH oversight process as a purchaser of services to promote and monitor service delivery that is recovery-oriented, person-centered and supporting of consumer choice as well as ensuring consumer health and safety.		X		X
STR09	Ensure access to quality services that utilize evidence based and promising practices that support recovery and community tenure and improve utilization of State hospital beds by decreasing length of stay.		X	X	
STR10	Support individuals with intellectual disabilities in the least restrictive environment while providing flexible and expanded opportunities for the highest level of	X			

Source ID	Goal	DDS	DMH	DPH	EOHHS
	choice and self-direction to the individuals and families we support.				
STR11	Promote research and best practice to help DMH fulfill its role as the State Mental Health Authority.		X		
STR12	Effectively carry out role of State Mental Health Authority beyond promoting research and best practices.		X		
STR13	Support staff by promoting learning, developing a highly qualified and culturally competent staff, and expanding the peer workforce.		X		
STR14	Support an environment in the DMH service system that promotes physical health and wellbeing in partnership.		X		

GOAL CATEGORY: ORGANIZATIONAL

Source ID	Goal	DDS	DMH	DPH	EOHHS
ORG01	Increase efficiency and reduce redundancy.	X	X	X	
ORG02	Provide innovative, high-quality, affordable evidence-based service and outcome focused patient care to residents of Massachusetts.			X	X
ORG03	Ensure effective management structure and processes to support programs, providers, funding, human resources, and service capacity.	X	X	X	X
ORG04	Create an organizational structure to enable active involvement of agencies surrounding wellness.			X	X
ORG05	Create a culture of openness and transparency.	X	X	X	X
ORG06	Improve collaboration and communication with hospitals through monthly meetings to enable information sharing and improve value and quality of care.			X	X
ORG07	Enhance statewide understanding of the IT needs opportunities and demands facing all facilities and organizations that deliver services.			X	
ORG08	Increase productivity.	X	X	X	

Source ID	Goal	DDS	DMH	DPH	EOHHS
ORG09	Support the success of health care reform by maximizing health care quality and reducing health care costs.			X	X
ORG10	Ensure that supported individuals have choice of service delivery, provider and residential setting. And, build a strong self-direction service delivery model.	X	X		
ORG11	Reduce health disparities by promoting health equity.			X	X
ORG12	Strengthen local and state public health capacity.			X	
ORG13	Implement the Community First program, de-institutionalizing individuals from nursing facilities and state residential facilities and building a strong residential infrastructure to manage all residential needs for all populations including individuals turning 22 prioritized for residential and other special populations.	X			
ORG14	Strengthen DDS processes for measuring and improving individuals' satisfaction with DDS and its programs and services.	X			
ORG15	Integrated facility maintenance and property management system including adopting equipment management RFID technology to manage clinical assets.			X	
ORG16	Sustain retention and recruitment gains for all staff.	X	X	X	
ORG17	Promote wellness and reduce chronic disease.			X	

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GOAL CATEGORY: PROGRAMMATIC/SERVICE DELIVERY

Source ID	Goal	DDS	DMH	DPH	EOHHS
PG01	Enhance continuity of care between inpatient and community services, including follow-through with outpatient care, in order to achieve more successful discharges for patients and support community first placements in the appropriate care setting.	X	X	X	
PG02	Develop working relationships with other relevant community organizations and natural supports to help facilitate clients leading full lives in the community with the support networks of their choosing.	X	X	X	
PG03	Continue to successfully provide and enhance all family support services across the Commonwealth.	X	X		
PG04	Assure that services are provided and planned in collaboration with clients, are individualized, and are delivered in the least restrictive, clinically appropriate environment. Services should be age and developmentally appropriate and based on evidence based practices/best practices.	X	X		
PG05	Utilize decision support systems to inform policy and planning and to promote continuous quality improvement.		X		
PG06	Build and implement employment programs that will meet the needs of individuals supported and provide a greater sense of empowerment and accomplishment.	X			
PG07	Build a stronger Assistive Technology program, e.g. customized wheelchairs and other technology that enables individuals with disabilities to live more independently.	X			
PG08	Ensure quality homes, quality employment programs, and self-direction (consumer-directed opportunities within service delivery).	X			
PG09	Enhance sustainable and affordable residential options that meet the individuals' needs, such as shared living.	X			
PG10	Effectively manage needs of people turning 22, consumers newly eligible and individuals with changing needs in light of limited new resources, including maximizing MassHealth State Plan services such as Day Habilitation and Adult Foster Care.	X			

Source ID	Goal	DDS	DMH	DPH	EOHHS
PG11	Support and improve harm reduction and risk management practices.		X		
PG12	Implement a system that provides for data to be collected to support key performance indicators.		X		
PG13	Implement bedside medication administration to Support the "5 R's" (1. Right patient 2. Right time and Frequency of Administration 3. Right Dose 4. Right Route of Administration 5. Right Drug).			X	
PG14	Integrated clinical focused pharmacy distribution and administration system.			X	
PG15	Maximize opportunities in Ambulatory Care Clinics, especially Primary Care, to achieve public health goals of reducing health disparities and promoting patient wellness.			X	
PG16	Explore correctional system needs with public safety agencies to provide palliative and skilled nursing care for aging or terminally ill inmates.			X	

GOAL CATEGORY: NEXT GENERATION SYSTEM

Source ID	Goal	DDS	DMH	DPH	EOHHS
Common Standardization Goals					
NXG01	Consolidated and standardization of system environment (all same hardware, software, 1 license, 1 contract for all of EOHHS).	X	X	X	X
NXG02	Increase interoperability and transparency within all systems (e.g. Human Resource Division Systems, Pharmacy, and Other Hospital Information Systems).	X	X	X	X
NXG03	Improve the use of technology to better manage programs, increase/track productivity, support data analytics, and track patient outcomes.	X	X	X	X
NXG04	Maximize electronic access to current paper-based processes that facilitates patient flow efficiencies, care plan management, data retrieval and data trending and supports evidence based real-time clinical decision Support, standards compliance, e.g.,			X	X

Source ID	Goal	DDS	DMH	DPH	EOHHS
	medication reconciliation, consent forms.				
Common Analytic/Data Repository/Access Goals					
NXG05	Point-of-care technology that supports patient information and serves as document repository with access to real-time material to meet standards of care.	X	X	X	X
NXG06	Develop an easily queryable database across all agencies with real time data for developing evidenced based practice, enhancing population management and provide data for managing patient care.	X	X	X	X
NXG07	Improve access to data, improve data quality, quantity, timeliness and transparency and achieve data integration to provide real-time information to clinicians to support strategic and operational decisions.	X	X	X	X
NXG08	Develop reporting and data analytics capabilities to support billing, service utilization management/review and quality management.	X	X		
NXG09	Integrate system into the spectrum of clinical care data with business operations data (e.g., MMARS financials, HRCMS payroll and labor activity) to produce real-time management information, such as daily dashboard metrics, ability to develop departmental and service budgets, and measure costs/revenues by cost centers, such as nursing unit or clinical service/department.			X	
NXG10	System will ensure data quality and integrity based on business logic and workflows.	X	X	X	
NXG11	Develop metrics and system(s) to measure clinical productivity on a real-time basis.			X	
Common Interoperability Goals					
NXG12	Achieve clinical and programmatic data integration through Health Information Exchange (HIE), DMH Electronic Health Record (EHR), and other means.		X		
NXG13	Archive clinical documentation, meet interoperability and meaningful use standards of the National			X	X

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Source ID	Goal	DDS	DMH	DPH	EOHHS
	Coordinator for HIT and facilitate querying for real-time business analysis.				
NXG14	Continue to meet all federal and state standards and requirements around the use of technology, such as HIPAA, privacy, security and disaster recovery.	X	X	X	X
NXG15	Develop a common and single electronic medical record across agencies that fully supports outpatient services, surgical services and case management functions and promotes data sharing and agency communication.			X	X
NXG16	Establish a comprehensive, integrated healthcare information system solution that addresses all operational aspects for the facility and community based service areas (and includes an EHR), as well as the administrative/payor aspects for each agency and a requirement for the solution to operate and be maintained in the Commonwealth of Massachusetts regulatory environment.		X		
NXG17	Receive and transmit referrals and relevant patient data electronically (including telemedicine capabilities).			X	
Common CPOE-related Goals					
NXG18	Integrate Computerized Physician Order Entry and Clinical Decision Support systems into clinical practice (including Laboratory and x-ray) concurrent with SOPS installation of a replacement Pharmacy Information System that interfaces with the electronic medical record (Meditech) and automated dispensing systems (Pyxis)			X	X
NXG19	Maximize the secure use of wireless technology to promote bedside efficiencies, care process improvements and internet information access.			X	
Specific Goals					
NXG20	System must support training, education, clinical competency, licensing and professional development credentials and interface with benefits, payroll, time and attendance scheduling (responsive to bargaining unit agreements and a 24/7 operation), financial data, and utilization management and operational data.			X	

Source ID	Goal	DDS	DMH	DPH	EOHHS
NXG21	Develop a population based system that would accurately manage care and services and tie cost to quality and outcome measures.				X
NXG22	Strategize with correctional health systems the design and implementation of electronic medical records and data exchanges at prison and jail sites that ensures multi-agency interoperability with LSH lab, radiology, and other clinical and UR data.			X	
NXG23	Use technology to enhance the efficiency and effectiveness of the workforce, wherever they work, and improve patient outcomes.	X	X	X	

GOAL CATEGORY: QUALITY

Source ID	Goal	DDS	DMH	DPH	EOHHS
Q01	Maintain patient safety.	X	X	X	X
Q02	Ensure the highest level of quality across all programs.	X	X	X	
Q03	Ensure survey and certification process determines all homes and programs surveyed by OQE are in substantial compliance with OQE regulations (Office of Quality Enhancement).	X			
Q04	Implement revised ISP process that is more person-centered.	X			
Q05	Develop compliance measurement algorithms that track appropriate documentation frequency and issues auto-reminders when additional medical record documentation is necessary.			X	

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GOAL CATEGORY: FUNDING

Source ID	Goal	DDS	DMH	DPH	EOHHS
FND01	Maximize federal reimbursement by creating interoperability among agency and other systems.	X	X	X	
FND02	Meet all HIPAA standards for proper Revenue Cycle Management including: Eligibility, authorizations, billings, electronic payments and claims status.	X	X	X	
FND03	Maximize resources under state plan services.	X	X		
FND04	Maximize federal reimbursement under autism waiver, adult residential waiver, community living waiver, and the adult support waiver by: • increasing the number of individuals receiving waiver services; • maintaining eligibility, enrollment and delivery of supports and services that meet individuals' assessed needs; • ensuring compliance with waiver assurances as required by CMS; and • ensuring compliance with waiver claim checks.	X			
FND05	Implement Chapter 257 rates for services.	X			
FND06	Maximize Targeted Case Management (TCM) revenue by ensuring all CMS required documentation is complete.	X			

4. Conclusion

Each agency maintains strategic and organizational goals to deliver innovative, high-quality, affordable evidence-based service and outcome focused care to residents of Massachusetts. Each agency also has a goal to increase efficiency, reduce redundancy, maintain safety, and deliver services in the least restrictive setting. Within DDS, DMH and DPH, their specific organizational goals differ in how best to increase their capacity to serve clients and patients but all three agencies agree on a goal to better collaborate in providing continuity of care between inpatient and community services, to achieve more successful discharges for patients and support community first placements in the appropriate care setting.

In order to achieve their goals of delivering the best possible care, DDS, DMH and DPH each articulated a goal to increase interoperability and transparency within all systems (e.g. Next Generation System, Human Resource Division Systems, Pharmacy, Other Hospital Information Systems) to fully support their work. The Next Generation system is another area of broad agreement with each agency expressing goals related to developing point of care technology to support their workforce wherever they work. Goals related to building an easily accessible database with better quality data, more timely data and full data integration which provides real-time information to clinicians to support strategic and operational decisions, support data analytics and track patient outcomes were shared across all three agencies.

The Next Generation System will address MITA Goals and MITA Objectives along with transformative and strategic Agency Goals. When fully implemented it, will assist each of the participating agencies in meeting their goals to better use technology to support a broad range of activities and functions and support overall agency and service management.

Commonwealth of Massachusetts
Executive Office of Health and Human Services

Next Generation System Planning Project

Deliverable 3 A: SSP Maturity Model

Version 1.0

September 26, 2011

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Deliverable 3 A SSP Maturity Model

Table of Contents

Revision History:

Version	Delivered Date	Update Reason
v1.0	September 26, 2011	Initial submission to the Commonwealth

Background

This deliverable is part of Next Generation Systems Planning Project Activity 3 – "Performing the 'As Is' SS-A and Creating the Business Capability Model (BCM) and Technical Capability Model (TCM) for Each Agency". The SSP Maturity Model is the tool each agency will utilize to assess their current business capabilities and determine the current maturity level for each State Specific Process (SSP). The maturity levels for the MITA business processes that each agency identified as performing will be assigned using the MITA Part I Appendix D Business Capability Matrix forms.

The BerryDunn and Commonwealth agency leads will review the SSP Maturity Model and assign a maturity level to the SSP under discussion immediately following each SSP meeting.

Work Performed

To create the SSP Maturity Model, BerryDunn undertook the following tasks:

1. A Draft SSP Maturity Model methodology and template was developed in June and July, 2011 and was reviewed with Department of Mental Health (DMH) leads on July 8, 2011. BerryDunn recommended one set of SSP Maturity Measures be developed for use by all three agencies for all SSPs. The DMH team and Commonwealth's Project Manager supported this approach. The Commonwealth's Project Manager indicated that maturity level measures needed to be developed for Levels 1, 2 and 3 only.

2. Revised the Draft SSP Maturity Model based on the outcomes of the July 8, 2011 meeting with DMH, and circulated the revised draft to the BerryDunn agency leads for review and comment.

3. Incorporated BerryDunn team comments and presented final draft to DMH and the Commonwealth's Project Manager on July 13, 2011. No comments from the Commonwealth were received. DMH began using the SSP Maturity Model during their SSP meetings beginning on July 19, 2011.

4. Adopted the DMH-approved SSP Maturity Model for use by DDS. The SSP Maturity Model has been in use at DDS since the beginning of Activity 3 on August 3, 2011. The DDS Project Manager and Project Sponsor (Ken Smith) has approved use of this model for Activity 3 at DDS.

SSP Maturity Model

The SSP Maturity Model is presented on the following pages.

Next Generation System Planning Project

Deliverable 3 B SSP Maturity Model

Version 2.0

July 25, 2011

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Deliverable 3 B SSP Maturity Model

Table of Contents

Revision History:

Version	Delivered Date	Update Reason
v1.0	July 20, 2011	Initial submission to the Commonwealth.
v2.0	July 25, 2011	Revised and re-submitted to the Commonwealth.

Background

This deliverable is part of Next Generation Systems Planning Project Activity 3 – "Performing the 'As Is' SS-A and Creating the Business Capability Model (BCM) and Technical Capability Model (TCM) for Each Agency". The SSP Maturity Model is the tool each agency will utilize to assess their current business capabilities and determine the current maturity level for each State Specific Process (SSP). The maturity levels for the MITA business processes that each agency identified as performing will be assigned using the MITA Part I Appendix D Business Capability Matrix forms.

The BerryDunn and Commonwealth agency leads will review the SSP Maturity Model and assign a maturity level to the SSP under discussion immediately following each SSP meeting.

Work Performed

To create the SSP Maturity Model, BerryDunn undertook the following tasks:

1. Reviewed relevant MITA Framework 2.0 chapters and appendices.

2. Reviewed relevant Behavioral Health MITA Framework chapters and appendices.

3. Created a Draft SSP Maturity Model methodology and template and reviewed it with Department of Mental Health (DMH) leads on July 8, 2011. BerryDunn recommended one set of SSP Maturity Measures be developed for use by all three agencies for all SSPs. The DMH team and Commonwealth's Project Manager supported this approach. The Commonwealth's Project Manager indicated that maturity level measures needed to be developed for Levels 1, 2 and 3 only.

4. Revised the Draft SSP Maturity Model based on the outcomes of the July 8, 2011 meeting with DMH, and circulated the revised draft to the BerryDunn agency leads for review and comment.

5. Incorporated BerryDunn team comments and presented final draft to DMH and the Commonwealth's Project Manager on July 13, 2011. No comments from the Commonwealth were received. DMH began using the SSP Maturity Model during their SSP meetings beginning on July 19, 2011.

SSP Maturity Model

The SSP Maturity Model is presented on the following pages.

Commonwealth of Massachusetts
Executive Office of Health and Human Services

Next Generation System Planning Project

Deliverable 3 C SSP Maturity Model

Version 1.0

September 26, 2011

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Deliverable 3 C SSP Maturity Model

Table of Contents

Revision History:

Version	Delivered Date	Update Reason
v1.0	September 26, 2011	Initial submission to the Commonwealth

Background

This deliverable is part of Next Generation Systems Planning Project Activity 3 – "Performing the 'As Is' SS-A and Creating the Business Capability Model (BCM) and Technical Capability Model (TCM) for Each Agency". The SSP Maturity Model is the tool each agency will utilize to assess their current business capabilities and determine the current maturity level for each State Specific Process (SSP). The maturity levels for the MITA business processes that each agency identified as performing will be assigned using the MITA Part I Appendix D Business Capability Matrix forms.

The BerryDunn and Commonwealth agency leads will review the SSP Maturity Model and assign a maturity level to the SSP under discussion immediately following each SSP meeting.

Work Performed

To create the SSP Maturity Model, BerryDunn undertook the following tasks:

1. A Draft SSP Maturity Model methodology and template was developed in June and July, 2011 and was reviewed with Department of Mental Health (DMH) leads on July 8, 2011. BerryDunn recommended one set of SSP Maturity Measures be developed for use by all three agencies for all SSPs. The DMH team and Commonwealth's Project Manager supported this approach. The Commonwealth's Project Manager indicated that maturity level measures needed to be developed for Levels 1, 2 and 3 only.

2. Revised the Draft SSP Maturity Model based on the outcomes of the July 8, 2011 meeting with DMH, and circulated the revised draft to the BerryDunn agency leads for review and comment.

3. Incorporated BerryDunn team comments and presented final draft to DMH and the Commonwealth's Project Manager on July 13, 2011. No comments from the Commonwealth were received. DMH began using the SSP Maturity Model during their SSP meetings beginning on July 19, 2011.

4. Adopted the DMH-approved SSP Maturity Model for use by DPH. The SSP Maturity Model has been in use at DPH since the beginning of Activity 3 on September 14, 2011. The DPH Project Manager (Partha Gajula) and Technical Area Coordinator (David Olverson) has approved use of this model for Activity 3 at DPH.

SSP Maturity Model

The SSP Maturity Model is presented on the following pages.

Commonwealth of Massachusetts
Executive Office of Health and Human Services
Next Generation System Planning Project

Deliverable 4.3A (DDS): To Be Business Capability Matrix
(Based on MITA SS-A – Version 2.0)

March 30, 2012

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Deliverable 4.3A (DDS): To Be Business Capability Matrix

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Appendices:

Appendix A; Maturity Matrix (Definition)

Draft Version	Delivered Date	Update Reason
Version 1	February 10, 2012	Deliverable Issued
Version 2	March 30, 2012	Deliverable Re-issued to correct inconsistencies

Methodology

1.1   To Be Analysis Methodology

The DDS team used a combination of the MITA 2.0 Goals and Objectives, Agency Goals as defined during the first phase of the MITA project (May and June 2011), and identified agency needs and recommendations to inform the selection of Business Processes To Be Matured. A meeting was held on January 26, 2012, with DDS to review the drafted To Be Business Capability Matrix (BCM) and recommendations were incorporated into the final draft. A subset of processes (31 out of 72 or 43%) were identified and a rationale for selecting them is provided in the accompanying To Be Matrix.

The BerryDunn team used the following criteria in selecting the Processes To Be matured:
- Meets one or more MITA 2.0 Goals
- Meets one or more DDS Agency Goals identified in Activity 1
- Maturing the process improves a critical business function or functions
- Maturing the process will occur as a result of maturing another related or dependent process
- Maturing the process will allow other processes to mature as well
- Can be matured over a 2 to 5 year horizon

A meeting was held at DDS on January 26, 2012, to review all processes and reach consensus on those processes "To Be" matured. The 31 processes chosen To Be matured, which are presented in the accompanying matrix, meet DDS goals of supporting the development of an integrated Health Information System (HIS), enhancing collaboration between DDS, its providers, consumers and their families, and improving interoperability, reporting and data analytics capabilities to support billing, service utilization management and quality management. The chosen processes also meet the MITA goals and objectives surrounding interoperability, providing timely, accurate and easily accessible data, reducing duplication costs, breaking down artificial boundaries between systems and promoting overall best practices.

Note: The selection of a Process To Be Matured does not imply that the process must become more automated within 2 to 5 years; rather it implies that if and when system upgrades or a Next Generation System is put into place, these processes should be targeted for increased automation, interoperability or efficiency in the new system environment.

1.2 MITA Business Goals

- Promote an enterprise view that supports enabling technologies that are aligned with State business processes and technologies.
- Provide performance measurement for accountability and planning.
- Develop systems that can effectively communicate to achieve common program goals through interoperability and common standards.
- Support process improvement, including achieving interoperability between State organizations and a beneficiary-centric focus not constrained by organizational barriers.
- Provide an environment that supports flexibility, adaptability, and rapid response to changes in programs and technology.
- Improve information sharing and provide data that is timely, accurate, usable, and easily accessible in order to support analysis and decision making for healthcare management and program administration.
- Reduce duplication of costs by collecting/reusing data already available. elsewhere and using that data to administer the program more effectively.
- Coordinate with Public Health and integrate health outcomes with the Medicaid community.

1.3 MITA Objectives

- Promote reusable components through modularity
- Adapt data and industry standards
- Promote secure data exchange
- Promote efficient data sharing
- Beneficiary-centric focus
- Promote programmatic practices
- Integration of clinical and administrative data to enable better decision making
- Breakdown artificial barriers between systems, geography, and funding within the Title XIX program

1.4 MITA Technical Goals

- **Business driven.** Technology will only be used when it supports a business goal or objective; technology will not be used for technology's sake alone.
- **Implementation neutral.** States will continue to be responsible for selecting their own implementation technology (e.g., J2EE, .Net, etc.).
- **Platform independent.** Application software and infrastructure components should be developed for reusability and platform independence.
- **Adaptable, extensible, and scalable.**

- **Open technology and standards based.** The advantages of standardization (e.g., data sharing and interoperability) should be leveraged.
- **Security and privacy must be integrated** throughout MITA.
- **Interoperability standards** are established and followed.
- **Quality data is enabled** to support good decision making.
- **Current and proven technology** is selected.
- **Service-oriented Architecture (SOA)** Based.

MITA Business Capability Findings

DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 001	Determine DDS Eligibility	DDS processes intake application, verifies applicant's disability according to DDS regulations and renders an eligibility determination.	As Is	To Be		Meets multiple DDS strategic goals related to intake and eligibility, and working more collaboratively with families and individuals. This also achieves MITA goals of using technology to make workflows more efficient.
DDS - 002	Manage DDS Communication on Eligibility	DDS communicates with applicant/family according to the DDS eligibility regulation timeline and determination processes/outcomes.	As Is	To Be		Meets multiple DDS strategic goals related to intake and eligibility, and working more collaboratively with families and individuals. This also achieves MITA goals of using technology to make workflows more efficient.

* National Association of State Directors of Developmental Disabilities Services (NASDDDS)
**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 003	Manage All DDS and Waiver Applicant (and Family) Grievance and Appeal relative to All Types of Appealable Events	DDS Eligibility Team and/or Legal Unit manages the appeal process when ineligibility determinations are appealed.	As Is	To Be		Functionality to track and manage appeals within DDS.
DDS - 004	Manage All DDS and HCBS Waiver Individual (and Family) Information including Assessments, Documentation and Reports	DDS collects and maintains all information pertaining to an individual's eligibility status, evaluation of individual's and family's strengths and areas of need.	As Is	To Be		Meets multiple DDS strategic goals related to waivers and communications with families and individuals.
DDS - 005	Manage DDS Individual Service Prioritization	DDS administers and manages prioritization of services according to the individual's and family's strengths and areas of need.	As Is	To Be		Meets multiple DDS strategic goals including collaboration and planning on choice of service delivery and improving outcomes for DDS individuals, and MITA goal of using data to improve data analysis and program administration

* National Association of State Directors of Developmental Disabilities Services (NASDDDS)
**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 006	Manage All DDS and HCBS Waiver individual (and Family) Communication such as Letters and Notifications	DDS manages all communications with individuals and families including electronic note entries, and letters and notifications mailed to individuals and families.	As Is	To Be		Meets multiple DDS strategic goals related to waiver eligibility, and working more collaboratively with families and individuals. This also achieves MITA goals of using technology to make workflows more efficient. This process is an extension of DDS002 which was selected for improvement.
DDS - 007	Develop and Manage All DDS, ICF and HCBS individual Service Plans and Delivery	DDS develops and implements an Individual Support Plan for adults as required by regulation.	As Is	To Be		This is related to DDS 119 and they share common functionality. This meets DDS goals related to reducing staff time, improving inefficient workflows, and collaborating more closely with agencies, individuals and families.

* National Association of State Directors of Developmental Disabilities Services (NASDDDS)
**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 008	Manage DDS State-Funded Only Delivery Enrollment	DDS manages program enrollment for individuals in state-funded only services (individuals not enrolled in a waiver program).	As Is	To Be		Meets multiple DDS goals including reducing redundant processes, improving efficiency in operations and maximizing revenue from state-funded programs. It further supports the MITA goal of using data to improve data analysis and program administration. Dependent on intake/enrollment and will mature as a result of the maturation of DDS 001.
DDS - 010	Determine HCBS Waivers Eligibility	DDS determines individual eligibility for all HCBS waiver programs relative to individual's clinical needs and Medicaid status. DDS evaluates waiver program participants' clinical eligibility through adequate and appropriate assessments.	As Is	To Be		Meets multiple DDS strategic goals related to intake and eligibility, and working more collaboratively with families and individuals. This also achieves MITA goals of using technology to make workflows more efficient.

* National Association of State Directors of Developmental Disabilities Services (NASDDDS)
**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 011	Manage DDS Programs and HCBS Waivers Enrollment	All DDS and Waiver programs' enrollments are tracked.	As Is	To Be		Meets multiple DDS strategic goals related to intake and eligibility, and working more collaboratively with families and individuals. This also achieves MITA goals of using technology to make workflows more efficient.
DDS - 012	Monitor HCBS Waivers Eligibility	Interface with MassHealth for asset reports, monitor re-determination timelines, and assist families with related processes.	As Is			
DDS - 013	Manage HCBS Waiver Programs' Individual Service Planning Evaluation	Service Coordinator Supervisor evaluations of ISP planning preparedness are tracked in the Service Coordinator Supervisor Tool module in HCSIS.	As Is	To Be		There is a process in place to automate this process prior to a Next Generation System that will mature the process. The process supports the basis for assurances related to the waiver.
DDS - 014	Manage DDS HCBS Adult Waiver and other Adult Programs - Individual Allocations and Budgets	Adult HCBS waiver and other adult program budgets and individual allocations managed according to the individual support plan.		As Is		

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* National Association of State Directors of Developmental Disabilities Services (NASDDDS)
**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 016	Manage Wait Lists for Waiver Enrollment	DDS programs and waiver program capacities and wait lists are monitored according to DDS guidelines and CMS approved waivers.	As Is	To Be		Consistent with DDS Programmatic and Quality Goals.
DDS - 018	Suspend/Disenroll Individuals from All DDS Programs	DDS disenrolls individual from all DDS programs.	As Is	To Be		Improved interoperability and data integrity.
DDS - 021	Manage DDS Turning 22 Program Individual Budgets	DDS manages Turning 22 programmatic budget as appropriated and individual budgets as planned.	As Is			
DDS - 023	Manage DESE/DDS Program Application	DESE/DDS program applicants are screened for eligibility for enrollment in the DESE/DDS program according to program guidelines and appropriations.	As Is	To Be		Meets multiple DDS strategic goals related to intake and eligibility, and working more collaboratively with families and individuals. This also achieves MITA goals of using technology to make workflows more efficient and using data to improve data analysis and program administration.

* National Association of State Directors of Developmental Disabilities Services (NASDDDS)
**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 029	Manage DDS Individuals who are Admitted or are at Risk of Being Admitted to Nursing Facilities	For an individual at risk of admission to a nursing facility, per federal regulation, DDS must complete a Level 2 PASSR screen. Per results of PASSR individuals are either approved for NF stay or denied and give a provisional approval for 30-90 days. Specialized services are also recommended for those who are approved to stay. When approved to stay and remain in the NF over 90 days, individual becomes a Rolland Class Member, and all applicable communication and documentation, especially surrounding the RISP must now take place and be aggregated and managed.		As Is		
DDS - 032	Manage DDS ICF/MR Individual Assessments	ICF/MR individuals' clinical assessments and documentation are tracked according to Title XIX regulations.	As Is			
DDS - 036	Maintain and Manage Lists of DDS Individuals by Class	DDS tracks class membership of DDS individuals and their services.		As Is		
DDS - 039	Manage DDS Provider Procurement	DDS manages provider procurement according to the Commonwealth's procurement policies and includes Agency With Choice model.		As Is		

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 041	Manage DDS Contract Information (Type of Service, Activity Code, Frequency, Contract Capacity and Service Utilization, Locations, Primary Contract Owner etc.)	DDS provider contracting documentation and service utilization is tracked. Information is used in other SSP business processes, e.g., DDS-014.	As Is	To Be		Meets DDS goals of enhancing collaboration between DDS, providers and agencies, and achieves MITA and Next Generation System technology goals and decision support goals of using data to improve data analysis and program administration. Also advances interoperability with the provider ICMS.
DDS - 042	Manage DDS Provider Communication	DDS tracks communications with providers.	As Is	To Be		Meets DDS goals of enhancing collaboration between DDS, providers and agencies, and achieves MITA and Next Generation System technology goals. Also advances interoperability with the provider ICMS.

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 044	Manage Qualification of Agency (as opposed to Individual) Providers to Deliver DDS Services	DDS qualifies Agency Providers, including Agency with Choice Providers, to be approved to provide specific DDS services. This business process applies to "Traditional Providers," who are qualified through EOHHS and DDS to provide "Traditional Services" and usually have contracted slots; and Agency with Choice Providers, an arrangement where an Agency hires (co-employs) an Individual Provider at a rate negotiated by the individual receiving services and is credentialed like a Traditional Provider even though it has a variable rate structure as opposed to a contract.	As Is	To Be		Meets DDS goals of enhancing collaboration between DDS, providers and agencies, and achieves MITA and Next Generation System technology goals.
DDS - 046	Provider Listing of Available Providers to Deliver Services	DDS manages service directory for DDS Services including those in the HCBS Waiver Programs.	As Is			
DDS - 049	Manage DDS Transportation Brokers Cost/Utilization Information	DDS Regional and Area Offices manage transportation related funds.	As Is			

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 050A	Manage DDS HCBS Autism Participant Driven Program Individual and Agency Provider Eligibility	Autism providers are independent contractors/employees/agencies retained by the individual. DDS works with PPL to ensure the Individual Providers' qualifications comply with the HCBS Autism waiver programs' regulations.	As Is	To Be		Meets multiple DDS strategic goals related to intake and eligibility, and working more collaboratively with families and individuals. This also achieves MITA goals of using technology to make workflows more efficient (related to DDS 44).
DDS - 050B	Manage Adult Participant Directed Program Individual and Agency Provider Eligibility	Adult Participant Directed Program Providers are independent contractors/employees/agencies retained by the individual. DDS works with the individual and PPL to ensure the Individual Providers' qualifications comply with the DDS program requirements.	As Is	To Be		Meets DDS goals of enhancing collaboration between DDS, providers and agencies, and achieves MITA and Next Generation System technology goals. Also advances interoperability with the provider ICMS.

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 052	Autism and Adult PDP: Manage DDS HCBS Autism Participant Driven and Adult Programs Participant Directed Provider Agreements, Billing and Payment (non-claiming)	DDS tracks Autism Participant Driven and Adult Participant Directed providers' overall contractual terms.		As Is		
DDS - 056	Track DDS HCBS Waiver Program's Capacities	DDS tracks each DDS HCBS waiver program's capacity.	As Is	To Be		Meets multiple DDS strategic goals related to intake and eligibility, improved efficiency, and meets MITA and Next Generation System goals of improved data aggregation and reporting
DDS - 057	Submit DDS HCBS Waiver Program's Claims	DDS ensures that HCBS waiver programs' claims submitted are accurate.	As Is	To Be		Meets MITA goals related to data exchange and system interoperability, while also supporting DDS financial goals. Improved timeliness (dependent on MassHealth and ITD infrastructure).

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 058	Track DDS Service Coordination Caseload and Make Adjustments as Necessary	DDS needs to track for fairness issues and for overall EOHHS data submission requirements, the number of cases per service coordinator and average amount per area office per region and by discipline (transition coordinator versus children's coordinator versus adult coordinator versus SC2).	As Is	To Be		Supports both DDS programmatic and quality goals and initiatives.
DDS - 061	Track DDS ICF/MR Capacity and Census	DDS tracks ICF/MR Capacity and Census.	As Is			
DDS - 062	Manage and Submit DDS Targeted Case Management (TCM) Claims	DDS manages the life cycle of TCM claims and ensures accurate claiming of all federal Medicaid reimbursement for all programs contracted with Medicaid.		As Is		
DDS - 063	Manage DDS Accounts and Appropriations	Tracking and monitoring DDS expenditures relative to legislative appropriated funds in DDS's budget (IMPACT).		As Is		

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 070	Provision and Management of Waiver Assurances	Provision and management of waiver assurances as agreed upon with Medicaid..	As Is	To Be		Supports DDS Quality and Reporting goals, meets state and federal reporting guidelines and maximizes state and federal reimbursement. Integration of systems that draw data for the development and standardization of queries to improve timeliness and efficiency.
DDS - 071	Manage All DDS and HCBS Programs Reporting and Analysis Requirements	Ensure adequate reporting on all HCBS waiver programs through HCSIS reporting capabilities.	As Is	To Be		Supports Reporting goals, and allows DDS and EOHHS to meet state and federal reporting guidelines and maximizes state and federal reimbursement. This also meets the MITA goal of using data to improve data analysis and program administration. Integration of systems that draw data for the development and standardization of queries to improve timeliness and efficiency.

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 078	Manage DESE/DDS Program Individual Budget	Ensure accurate tracking of DESE/DDS program participants' budgets.	As Is			

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 079	Manage DESE/DDS Program Information	Track information specific to individuals participating in the DESE Program. DDS operates with funding from Dept of Education (changed to Department of Elementary and Secondary Education, DESE) and serves children ages 6 through 22nd birthday. It is essentially a diversion program to avoid placing kids in residential programs. It provides additional supports outside of school to help keep kids in public school. All participants are DDS eligible as children or adults and enter through the DDS eligibility process. There are about 300 kids in the program now, with about 200 waiting. DDS expects to serve about 100 from the waiting list in FY12. Providers are qualified to provide services (one-on-one supports, behavioral-based programming, plus "other related goods and services") through this program. DDS is in the process of updating the program to clarify parameters of covered services. DDS is in the process of developing a new application evaluation and waitlist process (to take other factors into account for example geographic location, holding/shedding applications, prioritization); the current process is based on the application date.	As Is	To Be		Meets DDS goals of enhancing productivity, improving workflows, reducing staff time and supports service delivery to DDS individuals.

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 082	Manage DDS Rolland/NF Program Information Management	Track information specific to Rolland/NF individuals.	As Is			
DDS - 085	Develop and Manage Housing Capacity	Ensure accurate tracking of housing stock, capacity and fiscal planning.	As Is			
DDS - 090	Evaluate and Track the Risk of DDS Individuals	Risk reviews are conducted for individuals presenting high risk behaviors and risk plans are developed and tracked for adult DDS eligible individuals determined to be at risk.	As Is			
DDS - 094	Establish HCSIS Access Roles for DDS and Provider Staff	HCSIS users are assigned access roles based on their business functions and level of authorization.	As Is			

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 096	DDS Manages Consumer Investigations including: Intake and coordination with DPPC on Investigations, Investigation of DDS Consumers Abuse/Mistreatment/ Neglect Complaints and Management of DDS Consumers Investigations Documentation, Reporting, Analysis and Communication	DDS Investigations unit is notified by DPPC about any abuse/neglect allegations on DDS consumers and liaises with DPPC regarding investigation findings. Investigations unit conducts investigations following receipt of abuse allegations from DPPC in HCSIS. Investigations unit maintains electronic (in HCSIS) and paper files of all documentation, reports and communications on each case. The Investigations Processing System (IPS) interfaces with HCSIS Investigations module and produces correspondence to affected parties.		As Is		

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 099	Manage DDS Incident Reporting and Analysis	Incident reports are filed and completed in the Incident Reporting module in HCSIS. Statistical reports are generated on all incident reports filed in HCSIS on incident types, prevalence, etc. This process applies to adults who are DDS eligible.		As Is		
DDS - 101	Manage DDS Medication Occurrence Reports	Details of medication errors/omissions are reported in the Medication Occurrence module in HCSIS.		As Is		
DDS - 102	Perform DDS Consumers Medication Occurrence Reports Analyses	Statistical reports are generated on all medication occurrence reports filed in HCSIS on incident types, prevalence, etc.		As Is		
DDS - 103	Manage DDS Consumers' Health Care Records	Consumer core demographic information is fed from Meditech and summary essential healthcare information is entered by providers into the Health Care Record module in HCSIS.	As Is	To Be		This supports MITA goals and objectives including centralized electronic health records, and shared clinical profiles across agencies who serve the individual.
DDS - 104	Manage DDS Consumers' Restraints Reports	All restraints performed on consumers are reported (captured/entered) in the Restraint module in HCSIS.		As Is		

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 105	Perform DDS Consumers' Restraints Reports Analyses	Statistical reports are generated on all restraints reports filed in HCSIS on incident types, prevalence, etc.	As Is	To Be		Meets DDS goals related to reduced staff time, improved reporting, individual safety. It also meets the MITA goal of using data to improve data analysis and program administration. Ability to perform trend analysis and use the data for program planning.
DDS - 106	Manage DDS Consumers' Death Reporting Information and Analysis	Consumer death reports are filed in the Death Reporting module in HCSIS. Statistical reports are generated on all death reports filed in HCSIS on causes and nature of death, etc.	As Is	To Be		Meets DDS goals related to reduced staff time, improved reporting, individual safety. It also meets the MITA goal of using data to improve data analysis and program administration. Ability to perform trend analysis and use the data for program planning. Integration with the system of record specifically on death reporting information. Interoperability with other systems for vital records.

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 110	Manage DDS Core Indicators Project	DDS's participation in the national Core Indicator Project is reported on and tracked in the National Core Indicator module in HCSIS.		As Is		
DDS - 112	Manage DDS Individual Funds	DDS establishes and manages individual fund accounts for individuals living in ICF/MR and state operated homes.	As Is			
DDS - 113	Manage DDS Individuals' Charges for Care	DDS establishes level of charges per individual's assets and income, and monitors the latter as charges are levied.	As Is			
DDS - 114	Manage DDS Individual Transportation Information	DDS tracks individuals' transportation information relative to mode, routes and cost.	As Is			
DDS - 115	Manage DDS Individual Legal Information (Guardian)	DDS's Legal department tracks all individuals' legal information and matters related to guardianship of an individual.	As Is			Note: Improved legal information sharing but standardization must be addressed before any maturation can be considered.

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 116	Maintain Accreditation	The Maintain Accreditation process provides assistance to ICFs in achieving and maintaining the accreditation and credentialing necessary for program participation.	As Is			
DDS - 117	Perform Population/Individual Outreach	The Perform Population and Individual Outreach business process originates internally within the Agency to identify and notify prospective and current Individuals about Agency programs and services; create and provide linguistically and culturally appropriate information and educational materials to those same Individuals; and monitor outreach efforts and effectiveness. Individual data is analyzed to develop outreach methods and materials and to target specific populations. The Perform Population and Individual Outreach process targets both prospective and current Individual populations. DDS works with individuals to maintain their Medicaid eligibility in order to ensure Waiver Eligibility. This process is covered in MITA-007.	As Is			This process will remain at a level 1 due to barriers out of DDS control that prevent further automation.

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 118	Develop Discharge Planning and Transition Plan from Institutional Settings	The Develop Discharge Planning and Transition Plan from Institutional Settings business process uses Federal and State-specific criteria, rules, best practices and professional judgment to develop discharge planning and transition plans that optimize successful outcomes. It includes activities to track and assess the individual and his/her treatment progress during the episode of care and status at discharge, evaluate individuals' needs for ongoing care and support services, and establish a long term plan for continuing and/or sustaining community supports and services.	As Is			
DDS - 119	Develop and Manage DDS Family Support Plans	The Develop and Manage DDS Family Support Plans business process creates and implements family support plans for children and adults.	As Is	To Be		This meets DDS goals related to reducing staff time, improving inefficient workflows, and collaborating more closely with agencies, individuals and families.

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 120	Manage Provider Agency Quality Assurance	DDS Quality Management/Surveys and Certifications system oversees DDS program providers' performance and ensures individual safety compliance in HCSIS - Quality Enhancement System (QE5).	As Is			Note: DDS intends that the QE5 system will eventually interface with PDM.
DDS - 121	Support Services Management	Support Services Management business area includes processes that support individuals in an institutional setting. It contains a broad set of business processes related to supporting care of individuals (e.g., dietary, housekeeping, laundry), and collects information about these activities.	As Is			
DDS - 122	Support Facility Infrastructure Management	Support Facility Infrastructure Management includes processes that are related to the operation of the facility, including engineering, maintenance, grounds, plumbing, etc.	As Is			
DDS - 123	Admission to Institutional Settings	The Admission to Institutional Settings process includes activities related to a DDS individual moving from the community to a nursing facility, ICF.	As Is			

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
DDS - 125	Cross-agency Communication and Record Sharing of Individual Information	This process shares a record for any individual who needs to be served by one of the other three agencies.	As Is	To Be		This process is consistent with DDS Goals, MITA Goals, and goals of the EOHHS. Sharing of client/individual information across agencies that may serve a client/individual is critical to efficient healthcare and program/services delivery.
DDS - 126	Determine DDS Eligibility for Autism Waiver	DDS reviews Autism Waiver applicants to verify their financial and clinical eligibility for the program.	As Is	To Be		Meets multiple DDS strategic goals related to intake and eligibility, and supports state and federal reporting compliance. Process is dependent on MassHealth forms/requirements.
DDS - 127	Autism Waiver Budget	DDS creates and manages individual's budget to support Autism Waiver program for individuals.	As Is			

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
M7**	Manage Applicant and Member Communication	The Manage Applicant and Member Communication business process receives requests for information, appointments and assistance from prospective and current members' communications such as inquiries related to eligibility, redetermination, benefits, providers; health plans and programs, and provides requested assistance and appropriate responses and information packages. Communications are researched, developed and produced for distribution via Send Outbound Transaction process.	As Is			

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
M37**	Apply Mass Adjustment	The Apply Mass Adjustment business process begins with the receipt or notification of retroactive changes. These changes may consist of changed rates associated with HCPCS, CPT, Revenue Codes, or program modifications/conversions that affect payment or reporting. This mass adjustment business process includes identifying the claims by claim/bill type or HCPCS, CPT, Revenue Code(s), or member ID that were paid incorrectly during a specified date range, applying a predetermined set or sets of parameters that will reverse the paid claims and repay correctly. This business process often affects multiple providers as well as multiple claims.	As Is			

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
M56**	Develop And Maintain Program Policy	The Develop and Maintain Program Policy Business Process responds to requests or needs for change in the agency's programs, benefits, or rules, based on federal or state statutes and regulations; governing board or commission directives; QIO findings; federal or state audits; agency decisions; and consumer pressure.	As Is			
M59**	Manage FFP for MMIS	The Federal government allows funding for the design, development, maintenance and operation of a federally certified MMIS. The Manage Federal Financial Participation business process oversees reporting and monitoring of Advanced Planning Documents and other program documents necessary to secure and maintain federal financial participation. These are the types of functions within this business area but this does not appear to be a stand-alone process.	As Is			

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DDS Legacy#	Business Process Title	Business Process Description	Level 1	Level 2	Level 3	Rationale
M60**	Formulate Budget	The Formulate Budget business process examines the current budget, revenue stream and trends, and expenditures, assesses external factors affecting the program, assesses agency initiatives and plans, models different budget scenarios, and periodically produces a new budget.	As Is			

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Commonwealth of Massachusetts
Executive Office of Health and Human Services
Next Generation System Planning Project

Deliverable 4.3B (DMH): Final To Be Business Capability Matrix
(Based on MITA SS-A – Version 2.0)

February 17, 2012

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Deliverable 4.3B (DMH): Final To Be Business Capability Matrix

Appendices:

Appendix A; Maturity Matrix (Definition)

Methodology

1.1   To Be Analysis Methodology

The DMH team used a combination of the MITA 2.0 Goals and Objectives, Agency Goals as defined during the first phase of the MITA project (May and June 2011), and identified agency needs and recommendations to guide the selection of Business Processes To Be Matured. A subset of processes (45%) were identified and the rationale for selecting them is provided in the accompanying To Be Matrix.

BerryDunn's DMH team used the following criteria in selecting the Processes To Be matured:
- Meets one or more MITA 2.0 Goals
- Meets one or more critical Agency Goals
- Maturing the process improves a critical business function or functions
- Can be matured over a 2 to 5 year horizon

A meeting was held at DMH on January 24, 2012, to review all processes and reach consensus on those processes "To Be" matured. The 14 processes chosen To Be matured, which are presented in the accompanying matrix, meet DMH goals of supporting the development of an integrated Health Information System (HIS) and HIE/EHR and improving interoperability, reporting and data analytics capabilities to support billing, service utilization management and quality management. The chosen processes also meet the MITA goals and objectives surrounding interoperability, providing timely, accurate and easily accessible data, supporting clinical practices, reducing duplication costs, breaking down artificial boundaries between systems and promoting overall good practices.

Note: The selection of a Process To Be Matured does not imply that the process <u>must</u> become more automated within 2 to 5 years; rather it implies that if and when system upgrades or a Next Generation System is put into place, these processes should be targeted for increased automation, interoperability or efficiency in the new system environment.

1.2   MITA Business Goals

- Promote an enterprise view that supports enabling technologies that are aligned with State business processes and technologies.
- Provide performance measurement for accountability and planning.
- Develop systems that can effectively communicate to achieve common program goals through interoperability and common standards.

- Support process improvement, including achieving interoperability between State organizations and a beneficiary-centric focus not constrained by organizational barriers.
- Provide an environment that supports flexibility, adaptability, and rapid response to changes in programs and technology.
- Improve information sharing and provide data that is timely, accurate, usable, and easily accessible in order to support analysis and decision making for healthcare management and program administration.
- Reduce duplication of costs by collecting/reusing data already available elsewhere and using that data to administer the program more effectively.
- Coordinate with Public Health and integrate health outcomes with the Medicaid community.

1.3   MITA Objectives

- Promote reusable components through modularity
- Adapt data and industry standards
- Promote secure data exchange
- Promote efficient data sharing
- Beneficiary centric focus
- Promote programmatic practices
- Integration of clinical and administrative data to enable better decision making
- Breakdown artificial barriers between systems, geography, and funding within the Title XIX program

1.4   MITA Technical Goals

- **Business driven.** Technology will only be used when it supports a business goal or objective; technology will not be used for technology's sake alone.
- **Implementation neutral.** States will continue to be responsible for selecting their own implementation technology (e.g., J2EE, .Net, etc.).
- **Platform independent.** Application software and infrastructure components should be developed for reusability and platform independence.
- **Adaptable, extensible, and scalable.**
- **Open technology and standards based.** The advantages of standardization (e.g., data sharing and interoperability) should be leveraged.
- **Security and privacy must be integrated** throughout MITA.
- **Interoperability standards** are established and followed.
- **Quality data is enabled** to support good decision making.
- **Current and proven technology** is selected.
- **Service-oriented Architecture (SOA)** Based.

MITA Business Capability Findings

Agency	DMH Logical Order #	Business Process Title	Level 1	Level 2	Level 3	Rationale
DMH	1, 3	Determine Appropriateness for DMH Services and Determine Appropriate DMH Services	AS IS	-	-	
DMH	2	Register or Intake Patient/Client	AS IS	TO BE	-	Meets multiple DMH goals related to establishing an Integrated HIS and achieving clinical and data integration as well as improving efficiency.
DMH	4, 6	Coordinate and Track Service Delivery	AS IS	TO BE	-	Meets multiple DMH goals related to meeting HIPAA standards, establishing an Integrated HIS, and improving reporting capabilities.
DMH	5	Scheduling	AS IS	TO BE	-	Meets multiple DMH goals related to establishing an Integrated HIS and as well as improving efficiency.
DMH	7	Develop Plan Goals, Methods and Outcomes	AS IS	TO BE	-	Meets multiple DMH goals related to establishing an Integrated HIS and achieving clinical and data integration as well as improving efficiency.

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Agency	DMH Logical Order #	Business Process Title	Level 1	Level 2	Level 3	Rationale
DMH	8	Develop ISP / IAP, Goals and Outcomes	AS IS	TO BE	-	Meets multiple DMH goals related to establishing an Integrated HIS and achieving clinical and data integration as well as improving efficiency.
DMH	9	Manage Patient/Client Information	AS IS	TO BE	-	Meets the DMH goals related to establishing an Integrated HIS.
DMH	10	Manage data quality associated with Patient Medical Records	AS IS	TO BE	-	Meets multiple DMH goals related to establishing an Integrated HIS, achieving clinical and data integration.
DMH	11	Manage data completeness associated with Patient Medical Records	AS IS	TO BE	-	Meets multiple DMH goals related to establishing an Integrated HIS, achieving clinical and data integration and improving reporting capabilities.
DMH	12	Manage compliance of client privacy, security, and confidentiality regulations	AS IS	-	-	Enhanced auditing capabilities and more flexible job-based record access restrictions will enhance DMH's ability to manage compliance of client privacy and confidentiality.
DMH	13	Manage Release of Medical Record Information	AS IS	-	-	

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Agency	DMH Logical Order #	Business Process Title	Level 1	Level 2	Level 3	Rationale
DMH	14,15	Manage Order Entry/Manage Pharmacy Services	AS IS	TO BE	-	Meets multiple DMH goals related to establishing an Integrated HIS, achieving clinical and data integration as well as meaningful use criteria.
DMH	16	Manage Insurance Information, Billing, Claiming, and A/R Maintenance	AS IS	TO BE	-	Meets multiple DMH goals related to maximizing Federal Reimbursement and assuring compliance with HIPAA regulations.
DMH	17	Receive, Process Service Delivery Information from Contract Provider	AS IS	TO BE	-	Meets multiple DMH goals related to establishing an Integrated HIS, improving efficiency, maximizing Federal Reimbursement and assuring compliance with HIPAA regulations.
DMH	18	Discharge Patient/Client	AS IS	TO BE	-	Meets multiple DMH goals related to establishing an Integrated HIS, achieving clinical and data integration and improving reporting capabilities.

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Agency	DMH Logical Order #	Business Process Title	Level 1	Level 2	Level 3	Rationale
DMH	19	Collaborate and Coordinate Care of Shared Clients with other State Agencies	AS IS	-	-	Dependent on resolution of policy issues, as well as coordination with other Agencies (e.g. DCF) at the EOHHS level, as well as external agencies such as DOC and DOE. Focus should also be on DMH/DPH shared facilities for improved data collaboration.
DMH	20	Manage Consumer Funds	AS IS	-	-	
DMH	21	Coordination of Legal, Forensic, Guardianship	AS IS	-	-	Components of this Process would be moved to a level 2, but not the entire Process. Critical functions to be enhanced in a new system would include tracking/communication about legal status with system-wide availability of data according to user access and management, and tracking of court dates, documentation, due dates, etc.
DMH	22	Incident Management	AS IS	-	-	Components of this Process would be moved to a level 2, but not the entire Process.

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Agency	DMH Logical Order #	Business Process Title	Level 1	Level 2	Level 3	Rationale
DMH	23	Develop, Monitor and Manage Performance Measures and Reporting	AS IS	-	-	With the implementation of a new DMH system, this Process should naturally move to a level 2 due to improved reporting capabilities and tighter integration of contract information and provider profiles.
DMH	24	Accreditation Process	AS IS	-	-	
DMH	25	Manage Provider/Contractor Procurement	AS IS	TO BE	-	Meets multiple DMH goals related to establishing an Integrated HIS, improving efficiency, maximizing Federal Reimbursement and assuring compliance with HIPAA regulations.
DMH	26	Manage DMH Contracts	AS IS	TO BE	-	Meets multiple DMH goals related to establishing an Integrated HIS, improving efficiency, maximizing Federal Reimbursement and assuring compliance with HIPAA regulations.

**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

Agency	DMH Logical Order #	Business Process Title	Level 1	Level 2	Level 3	Rationale
DMH	27	Manage General Ledger	AS IS	-	-	
DMH	28	Manage Licensing Process	AS IS	-	-	
DMH	M56**	Develop And Maintain Program Policy	AS IS	-	-	
DMH	M58**	Develop Agency Goals	AS IS	-	-	
DMH	M67**	Establish Business Relationship	AS IS	-	-	
DMH	M68**	BR Manage Business Relationship	AS IS	-	-	
DMH	M69**	Manage Business Relationship Communications	AS IS	-	-	

**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

Agency	DMH Logical Order #	Business Process Title	Level 1	Level 2	Level 3	Rationale
DMH	M70**	Terminate Business Relationship	AS IS	-	-	

_____
**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

Commonwealth of Massachusetts
Executive Office of Health and Human Services
Next Generation System Planning Project

Deliverable 4.3C (DPH- BoPHF): Final To Be Business Capability Matrix
(Based on MITA SS-A – Version 2.0)

February 10, 2012

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Deliverable 4.3C (DPH - BoPHF): Final To Be Business Capability Matrix

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Appendices:

Appendix A; Maturity Matrix (Definition)

Methodology

1.1   To Be Analysis Methodology

The DPH - BoPHF team used a combination of the MITA 2.0 Goals and Objectives, Agency Goals as defined during the first phase of the MITA project (May and June 2011), and identified agency needs and recommendations to guide the selection of Business Processes To Be Matured. A subset of processes, (43.5%) were identified and the rationale for selecting them is provided in the accompanying To Be Matrix. For DPH - BOPHF, particular attention was paid to the 10 business processes that were reviewed and discussed in detail at all four DPH - BOPHF hospitals during Activity 3, due to the fact that these processes were selected by the agency for their uniqueness.

BerryDunn's DPH - BOPHF team used the following criteria in selecting the Processes To Be matured:
- Meets one or more MITA 2.0 Goals
- Meets one or more Agency Goals
- Maturing the process improves a critical business function or functions
- Can be matured over a 2 to 5 year horizon
- Impacted direct patient care at all four hospitals

A meeting was held with the DPH-BoPHF Information Management Governance Committee (IM Governance Committee) on January 25, 2012, to review all processes and reach consensus on those processes "To Be" matured. The 20 processes chosen To Be matured, which are presented in the accompanying matrix, meet the DPH - BOPHF goals of integrating HIS, supporting the development of HIE/EHR and goals related to automated reporting, timeliness, reducing expenses and improved efficiencies. The chosen processes also meet the MITA goals and objectives surrounding interoperability, providing timely, accurate and easily accessible data, supporting clinical practices, breaking down artificial boundaries between systems and promoting overall good practices.

Note: The selection of a Process To Be Matured does not imply that the process must become more automated within 2 to 5 years, rather it implies that if and when system upgrades or a Next Generation System is put into place, these processes should be targeted for increased automation, interoperability or efficiency in the new system environment.

1.2   MITA Business Goals

- Promote an enterprise view that supports enabling technologies that are aligned with State business processes and technologies.
- Provide performance measurement for accountability and planning.
- Develop systems that can effectively communicate to achieve common program goals through interoperability and common standards.
- Support process improvement, including achieving interoperability between State organizations and a beneficiary-centric focus not constrained by organizational barriers.
- Provide an environment that supports flexibility, adaptability, and rapid response to changes in programs and technology.
- Improve information sharing and provide data that is timely, accurate, usable, and easily accessible in order to support analysis and decision making for healthcare management and program administration.
- Reduce duplication of costs by collecting/reusing data already available elsewhere and using that data to administer the program more effectively.
- Coordinate with Public Health and integrate health outcomes with the Medicaid community.

1.3   MITA Objectives

- Promote reusable components through modularity.
- Adapt data and industry standards.
- Promote secure data exchange.
- Promote efficient data sharing.
- Beneficiary centric focus.
- Promote programmatic practices.
- Integration of clinical and administrative data to enable better decision making.
- Breakdown artificial barriers between systems, geography, and funding within the Title XIX program.

1.4 MITA Technical Goals

- **Business driven.** Technology will only be used when it supports a business goal or objective; technology will not be used for technology's sake alone.
- **Implementation neutral.** States will continue to be responsible for selecting their own implementation technology (e.g., J2EE, .Net, etc.).
- **Platform independent.** Application software and infrastructure components should be developed for reusability and platform independence.
- **Adaptable, extensible, and scalable.**
- **Open technology and standards based.** The advantages of standardization (e.g., data sharing and interoperability) should be leveraged.
- **Security and privacy must be integrated** throughout MITA.
- **Interoperability standards** are established and followed.
- **Quality data is enabled** to support good decision making.
- **Current and proven technology** is selected.
- **Service-oriented Architecture (SOA)** Based.

MITA Business Capability Findings

DPH #	Business Process Title	Level 1	Level 2	Rationale
15	Manage Patient/Client Information (HIM)	AS IS	TO BE	Automate to make access to comprehensive, integrated Electronic Health Records (EHR) more easily accessible and queryable in order to improve patient care. Improve internal and external interoperability.
16/41	Inquire Patient/Client Information and Manage Reproduction of Medical Records	AS IS	TO BE	Ability to reproduce Electronic Health Records electronically. Support archiving and transmission of medical records.
20	Manage Patient/Client Grievance and Appeal	AS IS		
43	Manage Provider/Contractor Procurement	AS IS		
44	Award Provider/Contractor Contract	AS IS		
45	Manage Provider/Contractor Contracts	AS IS		
46	Close out Provider/Contractor Contracts	AS IS		
47	Register Providers/Contractors	AS IS		
51	Manage Provider/Contractor Grievance and Appeal	AS IS		
M1**	Determine Eligibility	AS IS	TO BE	Improve timeliness and accuracy of eligibility information in order to reduce denials, payment and/or service delays. Improve internal and external interoperability.

**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

DPH #	Business Process Title	Level 1	Level 2	Rationale
M2**	Enroll Member	AS IS		
29	Manage Position Control	AS IS		
30	Manage Recruitment	AS IS		
31	Manage Staff Scheduling	AS IS	TO BE	Enable Human Resources' and Payroll Data to be more readily used in scheduling of staff.
32	Manage Accounting	AS IS		
34	Manage Time-keeping and Payroll	AS IS	TO BE	Enable Human Resources' and Payroll Data to be more readily used in scheduling of staff.
37	Manage Revenue Cycle	AS IS	TO BE	Determine and automate key input/interface points and develop standardized management reporting (Dashboards) necessary for comprehensive revenue management.
38	Manage Reimbursement and Budget	AS IS		
39	Formulate Budget	AS IS		
40	Manage Collection and Storage of Health Information	AS IS	TO BE	Automate to make access to comprehensive, integrated Electronic Health Records more easily accessible and queryable in order to improve patient care. Improve internal and external interoperability.
M51**	Authorize Referral	AS IS	TO BE	Standardize and automate referral authorization and monitoring processes to support revenue retention goals and objectives. Streamline internal and external interoperability.
9	Create Business Relationship	AS IS		
10	Manage Business Relationship	AS IS		
11	Engage in Joint Planning	AS IS		

**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

DPH #	Business Process Title	Level 1	Level 2	Rationale
14	Create Communications Protocols	AS IS		
17	Respond to Consent Decrees	AS IS		
55	Develop Goals and Objectives	AS IS		
5	Develop and Manage Performance Measures and Reporting	AS IS	TO BE	Reduce paper, integrate data, implement automation and enhance connectivity. Support Meaningful Use and Accountable Care Organization goals and activities.
6	Monitor Performance and Business Activity	AS IS	TO BE	Integrate data between the System of Record (SOR) and other support information systems including occurrence reporting. Minimize manual effort by automating analysis and distribution.
21	Conduct Patient Pre-admission Process/Manage Wait List	AS IS	TO BE	Streamline existing phone, fax, screening and scheduling processes using value stream mapping methodology. Move from paper to scanned electronic sharing and data interchange. Pursue electronic scheduling and lay foundation for Health Information Exchange (HIE).
22	Register/Admit Patient/Client	AS IS	TO BE	Reduce existing heavy dependence on the SOR registration admission module. Provide functionality to refine data needs by patient type. Move from paper to scanned electronic sharing and data interchange. Pursue electronic scheduling and lay foundation for HIE. Eliminate barriers to electronic signature.
23	Conduct Initial Screening and Assessment	AS IS	TO BE	Systematize the screening process where appropriate; including electronic document management, electronic signatures and eligibility determination.
24	Develop Treatment Plan Goals,	AS IS	TO BE	Refine clinical indicators by patient population. Move from

**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

DPH #	Business Process Title	Level 1	Level 2	Rationale
	Methods, and Outcomes (including Discharge Plan)			paper to electronic medication management. Implement wireless and Point of Care (POC) where appropriate.
25	Provision and Coordination of Care Delivery	AS IS	TO BE	Refine and enhance performance improvement monitoring, utilization management and occurrence reporting tools. Support medication management.
26	Discharge Patient/Client	AS IS	TO BE	Move from paper to scanned electronic sharing and data interchange. Lay foundation for HIE. Eliminate barriers to electronic signature. Support medication management.
27	Manage and Monitor Patient/Client Outcomes	AS IS	TO BE	Move from manual monitoring to electronic supported clinical department interfaces.
28	Conduct Prevention Activities	AS IS		
61	Create Environment of Care and Physical Plant Plan	AS IS		
62	Manage and Monitor Environment of Care and Physical Plant Plan	AS IS		
64	Maintain Physical Plant and Environment of Care	AS IS		
1	Initiate Case or Event	AS IS		
2	Manage Case or Event	AS IS		
3	Manage Incident Reporting	AS IS	TO BE	Establish and standardize occurrence types and establish severity scale. Consolidate four hospitals to common SQL database. Web-enable incident reporting form. Develop/distribute dashboards. Use/automate report writer.
4	Conduct Routine Fiscal and Clinical Monitoring	AS IS	TO BE	Enhance measurable standards in SOR and State used information systems and continue to leverage Extraction

**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

DPH #	Business Process Title	Level 1	Level 2	Rationale
		AS IS	TO BE	Transfer Load (ETL) to warehouse data based on timely need. Develop/distribute dashboards. Use/automate report writer.
7	Manage Disallowances and Eligibility for Reimbursement	AS IS	TO BE	Automate and standardize documentation procedures to better support the education of professional and other staff on appropriate identification and documentation of conditions and co-morbidities in the health record.
8	Maintain Continuous Readiness for Accreditation	AS IS		

**Process numbers starting with "M" are MITA-specific processes specifically performed for Medicaid

Commonwealth of Massachusetts
Executive Office of Health and Human Services
Next Generation System Planning Project

Deliverable 4.4A (DDS): Final To-Be Technical Capability Matrix
(Based on MITA SS-A – Version 2.0)

February 14, 2012

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Deliverable 4.4A (DDS): Final To-Be
Technical Capability Matrix (TCM)

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1.0 Project Methodology/Results

1.1   Background

This "To-Be" Technical Capability Matrix (TCM) report builds upon the Activity 3 work that resulted in the production of the "As-Is" TCM report. The intent of this report is to address how the future or To-Be state of technology will mature in order to address the identified Business Capability Matrix (BCM) To-Be state. Approximately 44% of the Department of Developmental Services' (DDS) BCM As-Is business processes have been selected to mature by the BCM team. This report addresses the impact of that trajectory from a technical perspective and will assist DDS as it strives to improve the technical environment. Analogous to the As-Is report, this is a source document, that will become a key artifact in the planning, procurement and implementation of a next generation, MITA-compliant solution.

1.2   Project Approach

Consistent with the guiding principles of the project where "business drives technology", the BCM business processes are used as the catalysts to derive the future TCM maturity levels. This approach preserves the concept that the technical capabilities are enablers of business processes. With these principles in mind, the BerryDunn TCM team conducted the initial To-Be activity in collaboration with the BCM To-Be activity. The TCM team participated in the BCM meetings that were held during the week of January 23, 2012. Based on the resulting BCM To-Be business processes, the TCM team derived the TCM To-Be matrix. The TCM team held meetings with DDS during the week of February 6, 2012 to review the outcome of these business process drivers and the resulting technology implications and maturity concepts.

During the BCM As-Is activity, a consolidated list of 72 unique business processes were identified for DDS. Of the 72 business processes, 32 (44%) have been identified as targets for increases in maturity within the To-Be state. The BCM team used a combination of the MITA 2.0 goals/objectives, agency goals/needs, and recommendations to inform the selection of business processes to be systematically matured. These are the business processes that will be targeted for increases in automation, interoperability, and efficiency for the Next Generation Solution. Specifically, the BCM team used the following six criteria in selecting the business processes to be matured:

1. Meets one or more MITA 2.0 Goals;
2. Meets one or more DDS Agency Goals;
3. Maturing the process improves a critical business function or functions;
4. Maturing the process will occur as a result of maturing another related or dependent process;
5. Maturing the process will allow other processes to mature as well; and
6. Can be matured over a two to five year horizon.

Consistent with the TCM As-Is model, this report utilizes Solution Sets as the "centerpiece" of the TCM To-Be model. Solution Sets are logical groupings of systems, applications, and tools that support specific business functions. 24 Solution Sets have been identified across EOHHS through the Next Generation Systems Planning Project. 20 of the 24 Solution Sets are

applicable to DDS as identified through the cross-walk to DDS BCM business processes (*Table 1*). This alignment provides a direct correlation between the underlying technologies and the business processes they support.

The TCM team cross-walked the 32 business processes to be matured against the 24 EOHHS Solution Sets to determine which Solution Sets will be directly impacted by the BCM To-Be state. This exercise, as expected, revealed that some Solution Sets were supporting one or more of the business processes identified as needing to mature and depicted that 13 unique Solution Sets are used in support of these 32 business processes.
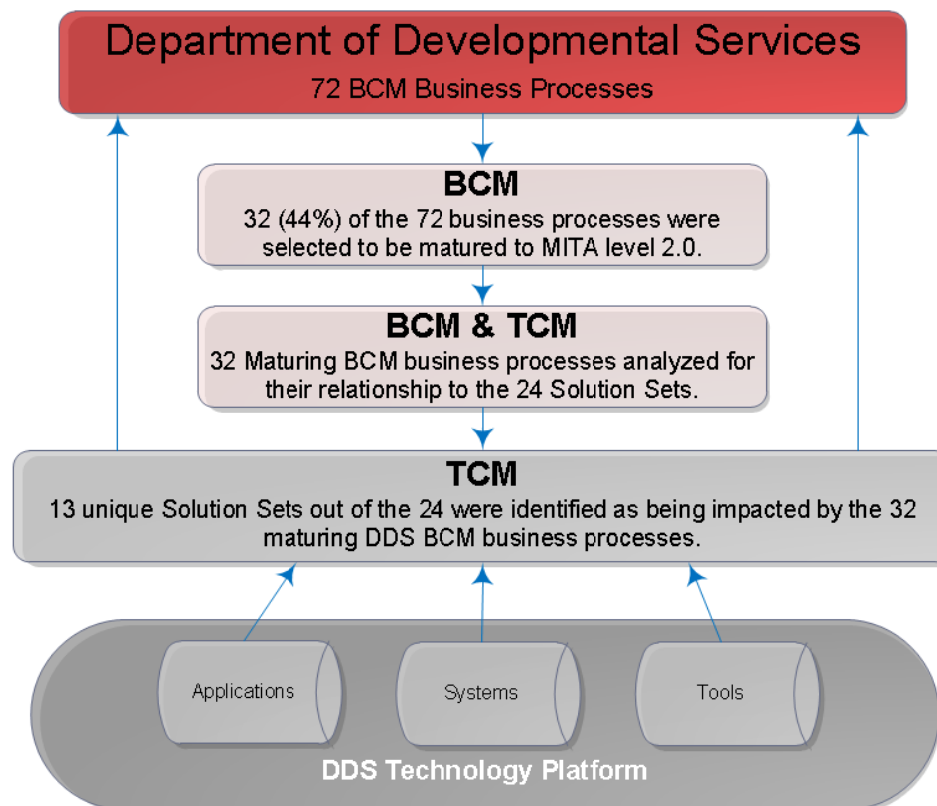
Figure 1: Maturing BCM business processes require enhancements to their Solution Sets.

The below table, *Table 1*, depicts all of the Solution Sets that support DDS' day-to-day business processes and efforts. Those BCM business processes that have been positioned to be matured are seen in bold. Business processes not in bold may still be enhanced and matured in the future, however, but have not been selected as targets for the BCM To-Be activity. *Please see Appendix* A for the full list of Solution Set definitions.

*Items in **bold** are the 32 BCM processes that have been selected to be matured.*

#	Solution Sets	Related Business Processes
1	Service Determination	n/a
2	Eligibility	**1**, **2, 3, 4, 10**, 12, **126**
3	Enrollment/Registration, Intake, and Discharge	**11**, **18**, **23**, 29,118, 123
4	Service Coordination, Tracking, and Communication	**5, 6**, **13**, 14, **16**, **56**, **58**, 61, 113, 114, M7
5	Scheduling	n/a
6	Care Planning and Treatment	**7, 8**, 32, 90, **119**
7	Medical Record Management	**103**
8	Information Privacy and Security	94
9	Order Entry, Laboratory, and Pharmacy	n/a
10	Claims, Billing and Financial Processing	14, 21, **57**, 62, 63, M37, M59, M60
11	Service Delivery Data from Contracted Providers	82
12	Interagency Coordination for Shared Client Services	**125**
13	Manage Consumer Funds	21, 112
14	Legal, Forensic, and Guardianship	90, 96, 115
15	Incident Management	90, 99, 101, 102, 104, **105**, **106**
16	Accreditation and Licensing	**50A, 50B**, 116, 120
17	Quality Management	**44, 110**, 120
18	Provider Performance Management	n/a
19	Provider and Contractor Management and Procurement	39, **41**, **42**, **44**, 46, 49, **50A,50B**, 52
20	Program Management	**56**, **70**, 78, **79**, 82, 85,117
21	Manage Policy and Goals	M56
22	Establish and Manage Business Relationships	n/a
23	Infrastructure Support and IT	94, 121, 122
24	Executive Support	36, 61, **70**, **71**, **79**, 82, 85, **105**, **106**, **110**, **127**

Table 1: DDS Business Processes to TCM Solution Set Cross-walk.

The BCM and TCM cross-walking effort showcases that in some instances Solution Sets support more than one of the 32 identified business processes. Most notably, these include the Solution Sets; Executive Support, and Service Coordination, Tracking, Communication and Eligibility, that each support six of the maturing business processes. In this way, these Solution Sets can be systematically organized by way of the business needs they support and overall DDS business process impact.

Number of Maturing Business Processes by Solution Set

■ Solution Sets

Solution Set	Value
Executive Support	6
Service Coordination, Tracking, and Communication	6
Eligibility	6
Provider and Contractor Management and Procurement	4
Program Management	3
Care Planning and Treatment	3
Enrollment/Registration, Intake, and Discharge	3
Quality Management	2
Incident Management	2
Accreditation and Licensing	1
Interagency Coordination for Shared Client Services	1
Claims, Billing and Financial Processing	1
Medical Record Management	1

Figure 2: DDS Solution Sets impacted by Maturing Business Processes.

The TCM team's effort to assess the impact and identify the target TCM To-Be state considered the As-Is scores of the 13 Solution Sets impacted by the To-Be business processes as well as their eight respective TCM sub-scores. Within the BCM context, the To-Be global and specific business process selection criteria were examined. Rationale for the business process selection as identified by the BCM team included the need for data integration capabilities, improved efficiencies, HIPAA standards compliance, enhanced reporting, increases in federal reimbursements and improved clinical data among others. In addition, each To-Be business process was examined at the BCM matrix level for respective technical details, e.g. interoperability, timeliness of process, data access and accuracy, effort to perform; efficiency and quality and accuracy of process results.

1.3   TCM To-Be Results

Based on the aforementioned approach, the TCM team has rationalized the TCM To-Be state that is depicted on the following page. As discussed above, the BCM To-Be rationale and matrix informed this impact assessment in order to derive the TCM To-Be state. Each TCM Solution Set impacted is targeted to advance to its correlating BCM To-Be state. While, the BCM and TCM matrices are not in comparison "apples to apples", their underlying attributes do suggest that in order to support each of the To-Be business processes at a 2.0 level, DDS will need the supporting Solution Sets to be at a 2.0 score as well.

It should also be mentioned, that the TCM team previously noted in the As-Is report that there were several under-served capabilities across Solution Sets that included: Access Channels, Interoperability, Flexibility/Adaptability and Extensibility. Based upon the technical architecture prevalent in the DDS environment, these scores were expectedly low. By addressing these core areas in the To-Be state, many of the Solution Sets, including those not specified to mature, will inherently advance above a 2.0 score as technologies that span across the DDS infrastructure are enhanced. Therefore, the 2.0 designation is a minimum expression of the To-Be state.

13 Solution Sets Supporting Maturing BCM Processes	Eligibility		Enrollment/Registration, Intake, and Discharge		Service Coordination/Tracking and Communication		Care Planning and Treatment		Medical Record Management		Claims, Billing and Financial Processing		Interagency Coordination for Shared Client Services		Incident Management		Accreditation and Licensing		Provider Quality Management		Provider and Contractor Management and Procurement		Program Management		Executive Support	
Technical Capability Matrix																											
	As-Is	To-be	As-Is	To-be	As-Is	To-be	As-Is	To-be	As-Is	To-be	As-Is	To-be	As-Is	To-be	As-Is	To-be	As-Is	To-be	As-Is	To-be	As-Is	To-be	As-Is	To-be	As-Is	To-be
B.0 Business Enabling Services	1.0	2.0	1.9	2.0	1.9	2.0	1.9	2.0	1.2	2.0	1.9	2.0	1.0	2.0	2.0	2.0	1.8	2.0	1.8	2.0	1.1	2.0	1.4	2.0	1.0	2.0
B.6 Decision Support	1.0	2.0	1.3	2.0	1.3	2.0	1.3	2.0	1.3	2.0	1.3	2.0	1.0	2.0	1.3	2.0	1.3	2.0	1.3	2.0	1.3	2.0	1.1	2.0	1.3	2.0
A.0 Access Channels	1.0	2.0	1.3	2.0	1.3	2.0	1.0	2.0	1.3	2.0	1.3	2.0	1.0	2.0	1.5	2.0	1.0	2.0	1.2	2.0	1.0	2.0	1.1	2.0	1.0	2.0
I.0 Interoperability	1.2	2.0	1.0	2.0	1.4	2.0	1.0	2.0	1.0	2.0	1.4	2.0	1.0	2.0	1.2	2.0	1.2	2.0	1.2	2.0	1.2	2.0	1.0	2.0	1.0	2.0
D.0 Data Management and Sharing	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0
P.0 Performance Measurement	1.0	2.0	1.1	2.0	1.1	2.0	1.0	2.0	1.0	2.0	1.5	2.0	1.0	2.0	1.1	2.0	2.0	2.0	2.0	2.0	1.6	2.0	1.4	2.0	1.0	2.0
S.0 Security and Privacy	1.5	2.0	1.9	2.0	1.9	2.0	1.9	2.0	1.9	2.0	1.9	2.0	1.0	2.0	1.8	2.0	1.7	2.0	1.7	2.0	1.7	2.0	1.5	2.0	1.5	2.0
F.0 Flexibility – Adaptability and Extensibility	1.0	2.0	1.2	2.0	1.2	2.0	1.2	2.0	1.2	2.0	1.2	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.1	2.0	1.0	2.0	1.2	2.0	1.0	2.0
Solution Set Average	**1.1**	**2.0**	**1.3**	**2.0**	**1.4**	**2.0**	**1.3**	**2.0**	**1.2**	**2.0**	**1.4**	**2.0**	**1.0**	**2.0**	**1.4**	**2.0**	**1.4**	**2.0**	**1.4**	**2.0**	**1.2**	**2.0**	**1.2**	**2.0**	**1.1**	**2.0**

Table 2: As-Is and To-Be of the Solution Sets that support the To-Be BCM.

Below are Solution Sets not impacted by the BCM To-Be that will remain at their current levels as defined in the As-Is report.

Solution Sets	Scheduling	Information Privacy and Security	Service Delivery Data from Contracted Providers	Manage Consumer Funds	Legal, Forensic, and Guardianship	Manage Policy and Goals	Establish and Manage Business Relationships	Infrastructure Support and IT
Technical Capability Matrix								
	As-Is	As-Is	As-Is	As-Is	As-Is	As-Is	As-Is	As-Is
B.0 Business Enabling Services	1.0	1.1	2.1	1.4	2.0	1.0	1.0	1.0
B.6 Decision Support	1.0	1.0	1.3	1.3	1.3	1.0	1.0	1.0
A.0 Access Channels	1.0	1.0	1.5	1.0	1.5	1.0	1.0	1.0
I.0 Interoperability	1.0	1.0	1.4	1.0	1.2	1.0	1.0	1.0
D.0 Data Management and Sharing	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0
P.0 Performance Measurement	1.0	1.0	1.8	1.0	1.1	1.0	1.0	1.0
S.0 Security and Privacy	1.0	1.3	1.8	1.5	1.8	1.0	1.0	1.0
F.0 Flexibility – Adaptability and Extensibility	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0
Solution Set Average	**1.0**	**1.1**	**1.5**	**1.2**	**1.4**	**1.0**	**1.0**	**1.0**

Table 3: Solution Sets not impacted by the BCM To-Be remain at their Current Maturity Levels.

2.0 Recommendations

Although the view into the DDS TCM is focused upon the relevant Solution Sets that are impacted by the maturing business processes, this report serves as the baseline TCM To-Be of the Next Generation Systems Planning Project. Review of the low scoring technical attributes in the As-Is TCM report should continue to be addressed going forward. Furthermore, replacing and/or improving technical areas in the targeted To-Be Solution Sets will inherently advance other Solution Sets in many cases.

As the targeted To-Be Solution Sets are reviewed, Appendix C, *"Weighted Solution Sets",* will provide the complete picture of DDS impact as it depicts all the applications, systems, tools, and other technology that comprise the entire 24 EOHHS Solution Sets. Then, at the most granular level, *Appendix B, "Application System Inventories"* identifies all the supporting sub-technologies such as databases, operating systems and application languages within the DDS technology platform including their specific support for the Solution Set.

With these detailed technology maps available, the DDS technology environment can be comprehensively understood, communicated, and scaled in order to support these maturing business processes and technologies in the future. This level of precision enforces the BCM business processes to be correlated to the underlying technologies that directly support them. This approach promotes maintenance of the established alignment so that any gaps between the current state and future state can be objectively addressed.

This understanding of the DDS technology environment is a key artifact to consider as future requirements are gathered and the vendor community is informed of both the technology environment in place at DDS today and the desired To-Be state.

Lastly, the DDS members of the TCM team have been extremely capable, collaborative, experienced and knowledgeable of both the business and technical environments. From an enterprise perspective, the other participating departments, BoPHF and DMH, while unique, do share similar characteristics including their technical environments. This continues to appear promising as it may be valuable to share planning and technology assets, services, and resources on this path to the future.

Appendix A: Enterprise Technology Solution Set Definitions

The 24 Enterprise Technology Solution Set Definitions

#	Solution Set Name	Functional Summary
1	Service Determination	Determine appropriateness for services; determine what services are needed and if they are available.
2	Eligibility	Determine eligibility, manage disallowances, manage all eligibility communications, manage all waivers, grievances and appeals related to eligibility. Manage program wait lists.
3	Enrollment/Registration, Intake, and Discharge	Intake screening, registration and admission, suspend/dis-enroll/discharge, track program capacity and censuses, and manage demographic data.
4	Service, Coordination/Tracking, and Communication	Coordination of care delivery, communication protocols, patient/client communication, coordination of discharge services and follow up care, referral authorization management, manage individual service prioritization, manage individual allocations and service budgets, manage waitlists for programs, and manage individual transportation information.
5	Scheduling	Manage staff scheduling, manage timekeeping and payroll, patient scheduling, resource scheduling, and group scheduling.
6	Care Planning and Treatment	Initial screening and assessment, treatment planning. Complete documentation of patient care using federal and state criteria, rules, best practices and professional judgment. Coordination of care delivery, discharge planning, managing patient outcomes, develops and manages individual service plans. Evaluate and document patient risk, restraint documentation and reporting of all patient care data as needed.
7	Medical Record Management	Management of all patient data in the health care record, collection and storage of client data, respond to consent decrees, manage patient/client grievances and appeals, manage request for protected health information both electronic and non electronic. Reviews and ensures data quality and completeness.
8	Information Privacy and Security	Manage compliance to privacy, security and confidentiality standards and regulations. Secure communications to meet confidentiality and legal requirements, security audits. Access based on role and level of authorization. Ensures all health information is protected.
9	Order Entry, Laboratory, and Pharmacy	Manage order entry, manage laboratory, and manage pharmacy services.
10	Claims, Billing and Financial Processing	Fiscal monitoring of patient/client, contractor services, program financial management, management position control, recruitment, accounting, 1099's, payroll, purchasing, accounts payable, revenue cycle, reimbursement, budget management and formulation, claims generation, auditing, mass adjustment, inquire payment status, manage recoupment, collections and recovery, authorize referrals and service, manage state fund, manage client specific service funds, generate financial and program analysis.
11	Service Delivery Data from Contracted Providers	Track patient data from contracted providers about quantity, type of service, delivered to individuals or groups storage of health care information.
12	Interagency Coordination for Shared Client Services	Create and manage business relationships, and engage in joint planning. Cross agency communication of patient information including sharing of aggregate data for the purpose of utilization management and performance monitoring.
13	Manage Consumer Funds	Manage individual patient funds not related to treatment.

#	Solution Set Name	Functional Summary
14	**Legal, Forensic, and Guardianship**	Document patient/client legal status, duty to warn, Roger's orders, forensic and guardianship data. Manage ongoing and potential legal cases/actions. Document and track risk evaluations. Coordinate and liaise with investigating agencies. Manage provider contracts. Manage client information policy. Respond to consent decrees. Manage patient grievance and appeals process.
15	**Incident Management**	Initiate and manage case and event reporting. Manage incident reporting. Manage medication occurrence reporting. Provide reporting on all incident types (including medication, restraint and other types).
16	**Accreditation and Licensing**	Manage program/providers surveys and certification. Manage accreditation and credentialing necessary for program participation. Monitor performance utilizing measures for accreditation and credentialing. Manage licensing of contracted providers.
17	**Quality Management**	Manage waiver programs provider qualifications, ensure program compliance as agreed upon with Medicaid, manage monitoring of national core indicators and performance measures, manage/monitor provider quality performance and compliance with standards. Conduct routine fiscal and clinical monitoring of patient outcomes and expenditures from a quality standpoint. Initiate, and manage case or event and subsequent incident reporting. Manage grievance and appeals process. Help to identify areas for improvement so preventive activities can be conducted. Perform contractor/provider outreach and training to ensure quality standards are defined. Allow for quality reporting.
18	**Provider Performance Management**	Establish mechanisms and requirements for developing, managing, and reporting performance measures, quality, outcomes, and other data for providers/ contractors to comply with agency, state, and federal reporting requirements. Analyze patient/client and service histories and trends, costs, and expenditures; assess external factors affecting the program; assess agency initiatives and plans; identify significant measurable activities and outcomes, and create and/or revise performance measures. Conduct and analyze client survey.
19	**Provider and Contractor Management and Procurement**	Manage provider/contractor procurement, awarding contracts, develop contracts, register providers/contractor, manage provider/contractor information, and close out contracts. Manage provider/contractor communications and grievance and appeals process, provide training and perform audits. Address requests for contractor/provider information. Monitor patient outcomes. Provide a provider listing of available providers to deliver services in support of participant direction. Manage transportation providers. Track participant driven budget. Manage budget billing and reimbursement for provider contracts.
20	**Program Management**	Manage all program individual waiver communications. Track waiver program capacities, provision and management of waiver assurances, manage individual program budgets, and manage program information. Maintain accurate tracking of housing capacity. Perform population and individual outreach.
21	**Manage Policy and Goals**	Develop and maintain program policy, agency goals and initiatives. Maintain state plan.
22	**Establish and Manage Business Relationships**	Create and manage business relationships, facilitate communication with business relationships. Engage in joint planning to coordinate efforts and programs between agencies. Develop and maintain program policy and agency goals. Terminate business relationships.
23	**Infrastructure and IT**	Manage information with respect to infrastructure and information technology including but not limited to computer devices, network topology, software, and other hardware/physical assets.
24	**Executive Support**	Reporting capability to support executive decisions and monitor all business process areas including but not limited too; population management, resource management, financial, quality, incident reporting, contract management, productivity etc.

Appendix B: Application System Inventories

Application System Inventory - Field Definitions	
Column Name	**Description of Column Contents**
Application Full Name	The full name of the application with description as appropriate.
App Type (COTS, Custom, Hybrid)	The application is primarily COTS, custom coded, or a hybrid.
X = Transaction Processing	An X indicates the system is used to record transactional information.
X = Information Access	An X indicates the system is used to communicate information, for example using lists or maps.
X = End-User / Group Productivity	An X indicates the system is used as a collaboration or group coordination tool.
X = Browser Delivery	An X indicates the system uses web browsers as the primary user interface.
Operating System & Platform	The OS and platform for operating the system.
Database	The database technology used by the system.
Language	The implementation language used by the system.
Data (Pers/PHI/FIN)	The system manages Personal, Health or Financial information.
Access Via (Inter/Intra/VPN)	Access to the system is via the Internet, Intranet or externally via VPN.
Scope (Bureau, Dept/Agency, Secretariat, Commonwealth)	The application's scope of use.
Year Installed	The year the system went live.
Number of IT Staff Assigned	The number of IT staff assigned, using fractional FTEs for part-time support.
Total Registered Users	The total number of end-users, indicating public access if appropriate.

Application Short Name	Application Full Name	App Type (COTS, Custom, Hybric)	X = Transaction Processing	X = Information Access	X = End-User / Group productivity	X = Browser Delivery	System Architecture = 2 Tier or 3 Tier	Operating System & Platform	Database	Language	Data (Pers /PHI/ FIN)	Access Via (Inter/ Intra/ VPN)	Scope (Bureau, Dept/Agency, Secretariat, Commonwealth)	Year Installed	Number of IT Staff Assigned	Total Registered Users	Systems Interfaced to
MEDITECH		COTS, Custom	x	x			2	Win 2k	SQL 2k	Magic	Pers/ePHI	VPN	Dept	2003	6	2,100	NewMMIS
HCSIS		COTS, Custom	x	x		x	3	Win 2003	Oracle 11 g / Linux	.NET, Java, COM	Pers/ePHI	VPN	Dept	2006	8	2,100	Meditech
PAM		COTS, Custom	X	X		X	3	Win 2003	Oracle 11 g / Linux	NET, Java, COM	FIN	VPN	Dept	2011	12		EIM / PPL
ICMS		Custom	x	x			3	Win 2003	SQL 2005	.Net	Fin	VPN	Dept	2008	2	30	Meditech/MMARS
IPS		Custom	x	x			3	Win 2003	SQL 2005	.Net	Pers/ePHI	VPN	Dept	2006	2	50	Meditech/ HCSIS
Autism		Custom	x	x			2	Win XP	SQL 2k	Access, VBA	Pers/ePHI	VPN	Dept	2008	1	10	
Application Security		Custom	x	x			2	Win XP	SQL 2k	SQL	Pers	VPN	Dept	2006	1	450	
HL7 (WaiverBilling)		Custom	x	x			2	Win XP	SQL 2k	VB.NET	Pers/ePHI	VPN	Dept	2005	1	6	Meditech/EIM/PPL
QE5		Custom	x	x		x	3	Win 2003	SQL 2005	.NET	Pers/ePHI	VPN	Dept	2011	2	65	Meditech/HCSIS
Client Funds		Custom	x	x			2	Win XP	SQL 2k	Access, VBA	Pers/ePHI	VPN	Dept	1999	1	25	Meditech
Waiver Sorting		Custom		x			2	Win XP	SQL 2k	Access, VBA	Pers/ePHI	VPN	Dept	2008	1	10	
MTReporting		Custom		x			2	Win XP	SQL 2k	Access, VBA	Pers/ePHI	VPN	Dept	2005	1	450	Meditech
FFP-Time		Custom	x	x		x	3	Win 2003	SQL 2k	ASP, COM	Pers	VPN	Dept	2004	1	35	MMARS

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Appendix C: Weighted Solution Sets

Key:
The application is a _____ support of the Solution Set:

A = Primary
B = Secondary
N = None Applicable

Application Short Name	Application Full Name	Eligibility	Enrollment/Registration, Intake, and Discharge	Service Coordination/Tracking and Communication and Communication	Scheduling	Care Planning and Treatment	Medical Record Management	Information Privacy and Security	Claims, Billing and Financial Processing	Service Delivery Data from Contracted Providers	Interagency Coordination for Shared Client Services	Manage Consumer Funds	Legal, Forensic, and Guardianship	Incident Management	Accreditation and Licensing	Quality Management	Provider and Contractor Management and Procurement	Program Management	Manage Policy and Goals	Establish and Manage Business Relationships with Medicaid	Infrastructure Support and IT	Executive Support
MEDITECH		n	a	a	n	a	a	b	a	n	n	n	a	**n**	b	b	n	a	n	n	n	b
HCSIS		n	b	a	n	b	b	b	n	n	n	n	a	**a**	n	b	n	b	n	n	n	b
PAM		n	n	b	n	n	n	n	a	a	n	n	n	**n**	n	n	b	b	n	n	n	n
ICMS		n	n	n	n	n	n	n	n	n	n	n	n	**n**	n	n	a	n	n	n	n	a
IPS		n	n	n	n	n	n	n	n	n	n	n	a	**b**	n	n	n	n	n	n	n	b
IMPACT		n	n	n	n	n	n	n	b	n	n	n	n	**n**	n	n	b	n	n	n	n	a
Autism		n	n	n	n	n	n	n	n	n	n	n	n	**n**	n	n	n	n	n	n	n	a
Application Security		n	n	n	n	n	n	b	n	n	n	n	n	**n**	n	n	n	n	n	n	n	n
HL7 (WaiverBilling)		n	n	n	n	n	n	n	b	n	n	n	n	**n**	n	n	n	n	n	n	n	n
QE5		n	n	n	n	n	n	n	n	n	n	n	n	**n**	a	a	a	n	n	n	n	a
Client Funds		n	n	n	n	n	n	n	n	n	n	a	n	**n**	n	n	n	n	n	n	n	b
Solution Set Support, e.g. Reporting and Interfaces																						
MTReporting																		n				
FFP-Time																		n				b
Non-DDS Systems																						
EIM		n	n	n	n	n	n	n	b	a	n	n	n	**n**	n	n	a	n	n	n	n	b

Commonwealth of Massachusetts
Executive Office of Health and Human Services
Next Generation System Planning Project

Deliverable 4.4B (DMH): Final To-Be Technical Capability Matrix
(Based on MITA SS-A – Version 2.0)

February 22, 2012

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Deliverable 4.4B (DMH): Final To-Be
Technical Capability Matrix (TCM)

Table of Contents

1.0 Project Methodology/Results

1.1   Background

This "To-Be" Technical Capability Matrix (TCM) report builds upon the Activity 3 work that resulted in the production of the "As-Is" TCM report. The intent of this report is to address how the future or To-Be state of technology will mature in order to address the identified Business Capability Matrix (BCM) To-Be state. Approximately 56% of the Department of Mental Health's (DMH) BCM As-Is business processes have been selected to mature by the BCM team. This report addresses the impact of that trajectory from a technical perspective and will assist DMH as it strives to improve the technical environment. Analogous to the As-Is report, this is a source document, that will become a key artifact in the planning, procurement and implementation of a next generation, MITA-compliant solution.

1.2   Project Approach

Consistent with the guiding principles of the project where "business drives technology", the BCM business processes are used as the catalysts to derive the future TCM maturity levels. This approach preserves the concept that the technical capabilities are enablers of business processes. With these principles in mind, the BerryDunn TCM team conducted the initial To-Be activity in collaboration with the BCM To-Be activity. The TCM team participated in the BCM meetings that were held during the week of January 23, 2012. Based on the resulting BCM To-Be business processes, the TCM team derived the TCM To-Be matrix. The TCM team held meetings with DMH during the week of February 6, 2012 to review the outcome of these business process drivers and the resulting technology implications and maturity concepts.

During the BCM As-Is activity, 34 unique business processes, comprised of 6 MITA-specific business processes and 28 Agency-Specific Processes (ASPs), were identified for DMH. Subsequently, the BCM To-Be activity consolidated these into 25 unique business processes that define the To-Be state. The remainder of the report will reference this set of 25 business processes.

Of the 25 business processes, 14 have been identified as targets for increases in maturity within the To-Be state. The BCM team used a combination of the MITA 2.0 goals/objectives, agency goals/needs, and recommendations to inform the selection of business processes to be systematically matured. These are the business processes that will be targeted for increases in automation, interoperability, and efficiency for the Next Generation Solution. Specifically, the BCM team used the following six criteria in selecting the business processes to be matured:

1. Meets one or more MITA 2.0 Goals;
2. Meets one or more DMH Agency Goals;
3. Maturing the process improves a critical business function or functions;
4. Maturing the process will occur as a result of maturing another related or dependent process;
5. Maturing the process will allow other processes to mature as well; and
6. Can be matured over a two to five year horizon.

Consistent with the TCM As-Is model, this report utilizes Solution Sets as the "centerpiece" of the TCM To-Be model. Solution Sets are logical groupings of systems, applications, and tools that support specific business functions. 24 Solution Sets have been identified across EOHHS through the Next Generation Systems Planning Project. 18 of the 24 Solution Sets are applicable to DMH as identified through the cross-walk to DMH BCM business processes (*Table 1*). This alignment provides a direct correlation between the underlying technologies and the business processes they support.

The TCM team cross-walked the 14 business processes to be matured against the 24 EOHHS Solution Sets to determine which Solution Sets will be directly impacted by the BCM To-Be state. This exercise, as expected, revealed that some Solution Sets were supporting one or more of the business processes identified as needing to mature and depicted that nine unique Solution Sets are used in support of these 14 business processes.
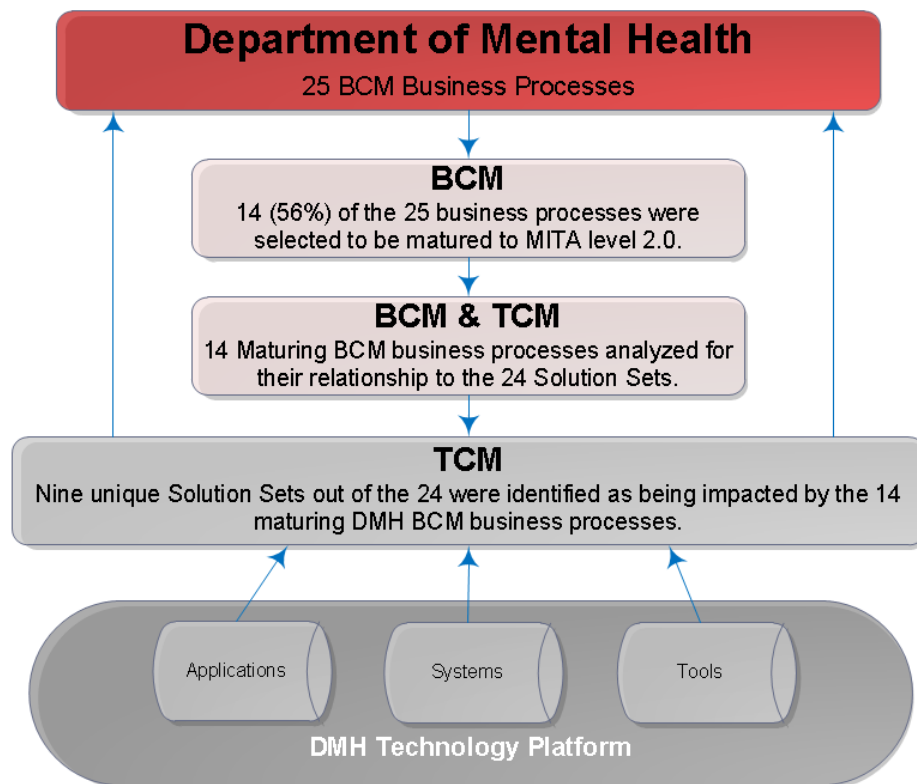
Figure 1: Maturing BCM business processes require enhancements to their Solution Sets.

The below table, *Table 1*, depicts all of the Solution Sets that support DMH's day-to-day business processes and efforts. Those BCM business processes that have been positioned to be matured are seen in bold. Business processes not in bold may still be enhanced and matured in the future, however, not selected as targets for the BCM To-Be activity. *Please see Appendix A for the full list of Solution Set definitions.*

*Items in **bold** are the 14 BCM processes that have been selected to be matured.*

#	Solution sets	Related Business Processes
1	Service Determination	1/3
2	Eligibility	n/a
3	Enrollment/Registration, Intake, and Discharge	**2**, **9**, **18**
4	Service Coordination/Tracking	**4/6**
5	Scheduling	**5**
6	Care Planning and Treatment	**7**, **8**
7	Medical Record Management	**9, 10, 11**, 13
8	Information Privacy and Security	12,13
9	Order Entry, Laboratory, and Pharmacy	**14, 15**
10	Claims, Billing and Financial Processing	**16**, 27
11	Service Delivery Data from Contracted Providers	**17**
12	Interagency Coordination for Shared Client Services	19
13	Manage Consumer Funds	20
14	Legal, Forensic, and Guardianship	21
15	Incident Management	22
16	Accreditation and Licensing	24, 28
17	Quality Management	n/a
18	Provider Performance Management	23
19	Provider and Contractor Management and Procurement	**25, 26**
20	Program Management	n/a
21	Manage Policy and Goals	M56, M58
22	Establish and Manage Business Relationships	M67, M68, M69, M70
23	Infrastructure and IT	n/a
24	Executive Support	n/a

Table 1: DMH Business Processes to TCM Solution Set Cross-walk.

The BCM and TCM cross-walking effort showcases that in some instances Solution Sets support more than one of the 14 identified business processes. Most notably, these include the Solution Sets, Medical Record Management, and Enrollment/Registration, Intake, and Discharge that both support three of the maturing business processes. Similarly, as seen below, four other Solution Sets support two business processes selected for maturation. In this way, these Solution Sets can be systematically organized by way of the business needs they support and overall DMH business process impact.

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Number of Maturing Business Processes By Solution Set

■ Solution Sets

Solution Set	Value
Enrollment/Registration, Intake, and Discharge	3.0
Medical Record Management	3.0
Provider and Contractor Management and Procurement	2.0
Care Planning and Treatment	2.0
Service Coordination/Tracking	2.0
Order Entry, Laboratory, and Pharmacy	2.0
Service Delivery Data from Contracted Providers	1.0
Claims, Billing and Financial Processing	1.0
Scheduling	1.0

Figure 2: DMH Solution Sets impacted by Maturing Business Processes.

The TCM team's effort to assess the impact and identify the target TCM To-Be state considered the As-Is scores of the nine Solution Sets impacted by the To-Be business processes as well as their eight respective TCM sub-scores. Within the BCM context, the To-Be global and specific business process selection criteria were examined. Rationale for the business process selection as identified by the BCM team included the need for data integration capabilities, improved efficiencies, HIPAA standards compliance, enhanced reporting, increases in federal reimbursements and improved clinical data among others. In addition, each To-Be business process was examined at the BCM matrix level for respective technical details, e.g. interoperability, timeliness of process, data access and accuracy, effort to perform; efficiency and quality and accuracy of process results.

1.3   TCM To-Be Results

Based on the aforementioned approach, the TCM team has rationalized the TCM To-Be state that is depicted on the following page. As discussed above, the BCM To-Be rationale and matrix informed this impact assessment in order to derive the TCM To-Be state. Each TCM Solution Set impacted is targeted to advance to its correlating BCM To-Be state. While, the BCM and TCM matrices are not in comparison "apples to apples", their underlying attributes do suggest that in order to support each of the To-Be business processes at a 2.0 level, DMH will need the supporting Solution Sets to be at a 2.0 score as well.

It should also be mentioned, that the TCM team previously noted in the As-Is report that there were several under-served capabilities across Solution Sets that included: Access Channels, Interoperability, Flexibility/Adaptability and Extensibility. Based upon the technical architecture

prevalent in the DMH environment, these scores were expectedly low. By addressing these core areas in the To-Be state, many of the Solution Sets, including those not specified to mature, will inherently advance above a 2.0 score as technologies that span across the DMH infrastructure are enhanced. Therefore, the 2.0 designation is a minimum expression of the To-Be state.

9 Solution Sets Supporting Maturing BCM Processes	Enrollment/Registration, Intake, and Discharge		Medical Record Management		Provider and Contractor Management and Procurement		Care Planning and Treatment		Service Coordination/Tracking		Service Delivery Data from Contracted Providers		Claims, Billing and Financial Processing		Order Entry, Laboratory, and Pharmacy		Scheduling	
Technical Capability Matrix																
	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be
B.0 Business Enabling Services	1.7	2.0	1.7	2.0	1.8	2.0	1.7	2.0	1.7	2.0	1.8	2.0	1.5	2.0	1.0	2.0	1.1	2.0
B.6 Decision Support	1.3	2.0	1.3	2.0	1.7	2.0	1.3	2.0	1.3	2.0	1.3	2.0	1.4	2.0	1.0	2.0	1.0	2.0
A.0 Access Channels	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.1	2.0	1.0	2.0	1.0	2.0	1.0	2.0
I.0 Interoperability	1.1	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.2	2.0	1.2	2.0	1.0	2.0	1.0	2.0
D.0 Data Management and Sharing	1.0	2.0	1.1	2.0	1.0	2.0	1.1	2.0	1.0	2.0	1.6	2.0	1.6	2.0	1.0	2.0	1.0	2.0
P.0 Performance Measurement	1.4	2.0	1.5	2.0	1.0	2.0	1.5	2.0	1.0	2.0	1.0	2.0	1.1	2.0	1.0	2.0	1.0	2.0
S.0 Security and Privacy	1.8	2.0	1.8	2.0	1.5	2.0	1.8	2.0	1.8	2.0	1.7	2.0	1.7	2.0	1.4	2.0	1.6	2.0
F.0 Flexibility – Adaptability and Extensibility	1.3	2.0	1.3	2.0	1.0	2.0	1.3	2.0	1.3	2.0	1.0	2.0	1.3	2.0	1.0	2.0	1.0	2.0
Solution Set Average	**1.3**	**2.0**	**1.3**	**2.0**	**1.3**	**2.0**	**1.3**	**2.0**	**1.3**	**2.0**	**1.3**	**2.0**	**1.3**	**2.0**	**1.1**	**2.0**	**1.1**	**2.0**

Table 2: As-Is and To-Be of the Solution Sets that support the To-Be BCM.

Below are Solution Sets not impacted by the BCM To-Be that will remain at their current levels as defined in the As-Is report.

Solution Sets	Service Determination	Information Privacy and Security	Interagency Coordination for Shared Client Services	Manage Consumer Funds	Legal, Forensic, and Guardianship	Incident Management	Accreditation and Licensing	Quality Management	Manage Policy and Goals	Establish and Manage Business Relationships	Executive Support
Technical Capability Matrix											
	As-Is	As-Is	As-Is	As-Is	As-Is	As-Is	As-Is	As-Is	As-Is	As-Is	As-Is
B.0 Business Enabling Services	1.7	1.3	1.2	1.1	1.7	1.5	1.2	1.9	1.0	1.0	1.0
B.6 Decision Support	1.3	1.0	1.1	1.0	1.3	1.6	1.0	1.0	1.0	1.0	1.4
A.0 Access Channels	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
I.0 Interoperability	1.0	1.0	1.2	1.0	1.0	1.0	1.1	1.2	1.0	1.0	1.0
D.0 Data Management and Sharing	1.0	1.0	1.6	1.0	1.0	1.0	1.2	1.0	1.0	1.0	1.1
P.0 Performance Measurement	1.4	1.0	1.1	1.0	1.2	1.0	1.0	1.7	1.0	1.0	1.1
S.0 Security and Privacy	1.8	1.3	1.5	1.7	1.7	1.3	1.7	1.5	1.0	1.0	1.6
F.0 Flexibility – Adaptability and Extensibility	1.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Solution Set Average	**1.3**	**1.1**	**1.2**	**1.1**	**1.2**	**1.2**	**1.1**	**1.3**	**1.0**	**1.0**	**1.2**

Table 3: Solution Sets not impacted by the BCM To-Be remain at their Current Maturity Levels.

2.0 Recommendations

Although the view into the DMH TCM is focused upon the relevant Solution Sets that are impacted by the maturing business processes, this report serves as the baseline TCM To-Be of the Next Generation Systems Planning Project. Review of the low scoring technical attributes in the As-Is TCM report should continue to be addressed going forward. Furthermore, replacing and/or improving technical areas in the targeted To-Be Solution Sets will inherently advance other Solution Sets in many cases.

As the targeted To-Be Solution Sets are reviewed, Appendix C, *"Weighted Solution Sets",* will provide the complete picture of DMH impact as it depicts all the applications, systems, tools, and other technology that comprise the entire 24 EOHHS Solution Sets. Then, at the most granular level, *Appendix B, "Application System Inventories"* identifies all the supporting sub-technologies such as databases, operating systems, and application languages within the DMH technology platform including their specific support for the Solution Set.

With these detailed technology maps available, the DMH technology environment can be comprehensively understood, communicated, and scaled in order to support these maturing business processes and technologies in the future. This level of precision enforces the BCM business processes to be correlated to the underlying technologies that directly support them. This approach promotes maintenance of the established alignment so that any gaps between the current state and future state can be objectively addressed.

This understanding of the DMH technology environment is a key artifact to consider as future requirements are gathered and the vendor community is informed of both the technology environment in place at DMH today and the desired To-Be state.

Lastly, the DMH members of the TCM team have been extremely capable, collaborative, experienced and knowledgeable of both the business and technical environments. From an enterprise perspective, the other participating departments, BoPHF and DDS, while unique, do share similar characteristics including their technical environments. This continues to appear promising as it may be valuable to share planning and technology assets, services and resources on this path to the future.

Appendix A: Enterprise Solution Set Definitions

The 24 Enterprise Solution set Definitions

#	Solution Set Name	Functional Summary
1	Service Determination	Determine appropriateness for services; determine what services are needed and if they are available.
2	Eligibility	Determine eligibility, manage disallowances, manage all eligibility communications, manage all waivers, grievances and appeals related to eligibility. Manage program wait lists.
3	Enrollment/Registration, Intake, and Discharge	Intake screening, registration and admission, suspend/dis-enroll/discharge, track program capacity and censuses, and manage demographic data.
4	Service, Coordination/Tracking, and Communication	Coordination of care delivery, communication protocols, patient/client communication, coordination of discharge services and follow up care, referral authorization management, manage individual service prioritization, manage individual allocations and service budgets, manage waitlists for programs, and manage individual transportation information.
5	Scheduling	Manage staff scheduling, manage timekeeping and payroll, patient scheduling, resource scheduling, and group scheduling.
6	Care Planning and Treatment	Initial screening and assessment, treatment planning. Complete documentation of patient care using federal and state criteria, rules, best practices and professional judgment. Coordination of care delivery, discharge planning, managing patient outcomes, develops and manages individual service plans. Evaluate and document patient risk, restraint documentation and reporting of all patient care data as needed.
7	Medical Record Management	Management of all patient data in the health care record, collection and storage of client data, respond to consent decrees, manage patient/client grievances and appeals, manage request for protected health information both electronic and non electronic. Reviews and ensures data quality and completeness.
8	Information Privacy and Security	Manage compliance to privacy, security and confidentiality standards and regulations. Secure communications to meet confidentiality and legal requirements, security audits. Access based on role and level of authorization. Ensures all health information is protected.
9	Order Entry, Laboratory, and Pharmacy	Manage order entry, manage laboratory, and manage pharmacy services.
10	Claims, Billing and Financial Processing	Fiscal monitoring of patient/client, contractor services, program financial management, management position control, recruitment, accounting, 1099's, payroll, purchasing, accounts payable, revenue cycle, reimbursement, budget management and formulation, claims generation, auditing, mass adjustment, inquire payment status, manage recoupment, collections and recovery, authorize referrals and service, manage state fund, manage client specific service funds, generate financial and program analysis.
11	Service Delivery Data from Contracted Providers	Track patient data from contracted providers about quantity, type of service, delivered to individuals or groups storage of health care information.
12	Interagency Coordination for Shared Client Services	Create and manage business relationships, and engage in joint planning. Cross agency communication of patient information including sharing of aggregate data for the purpose of utilization management and performance monitoring.
13	Manage Consumer Funds	Manage individual patient funds not related to treatment.

#	Solution Set Name	Functional Summary
14	**Legal, Forensic, and Guardianship**	Document patient/client legal status, duty to warn, Roger's orders, forensic and guardianship data. Manage ongoing and potential legal cases/actions. Document and track risk evaluations. Coordinate and liaise with investigating agencies. Manage provider contracts. Manage client information policy. Respond to consent decrees. Manage patient grievance and appeals process.
15	**Incident Management**	Initiate and manage case and event reporting. Manage incident reporting. Manage medication occurrence reporting. Provide reporting on all incident types (including medication, restraint and other types).
16	**Accreditation and Licensing**	Manage program/providers surveys and certification. Manage accreditation and credentialing necessary for program participation. Monitor performance utilizing measures for accreditation and credentialing. Manage licensing of contracted providers.
17	**Quality Management**	Manage waiver programs provider qualifications, ensure program compliance as agreed upon with Medicaid, manage monitoring of national core indicators and performance measures, manage/monitor provider quality performance and compliance with standards. Conduct routine fiscal and clinical monitoring of patient outcomes and expenditures from a quality standpoint. Initiate, and manage case or event and subsequent incident reporting. Manage grievance and appeals process. Help to identify areas for improvement so preventive activities can be conducted. Perform contractor/provider outreach and training to ensure quality standards are defined. Allow for quality reporting.
18	**Provider Performance Management**	Establish mechanisms and requirements for developing, managing, and reporting performance measures, quality, outcomes, and other data for providers/ contractors to comply with agency, state, and federal reporting requirements. Analyze patient/client and service histories and trends, costs, and expenditures; assess external factors affecting the program; assess agency initiatives and plans; identify significant measurable activities and outcomes, and create and/or revise performance measures. Conduct and analyze client survey.
19	**Provider and Contractor Management and Procurement**	Manage provider/contractor procurement, awarding contracts, develop contracts, register providers/contractor, manage provider/contractor information, and close out contracts. Manage provider/contractor communications and grievance and appeals process, provide training and perform audits. Address requests for contractor/provider information. Monitor patient outcomes. Provide a provider listing of available providers to deliver services in support of participant direction. Manage transportation providers. Track participant driven budget. Manage budget billing and reimbursement for provider contracts.
20	**Program Management**	Manage all program individual waiver communications. Track waiver program capacities, provision and management of waiver assurances, manage individual program budgets, and manage program information. Maintain accurate tracking of housing capacity. Perform population and individual outreach.
21	**Manage Policy and Goals**	Develop and maintain program policy, agency goals and initiatives. Maintain state plan.
22	**Establish and Manage Business Relationships**	Create and manage business relationships, facilitate communication with business relationships. Engage in joint planning to coordinate efforts and programs between agencies. Develop and maintain program policy and agency goals. Terminate business relationships.
23	**Infrastructure and IT**	Manage information with respect to infrastructure and information technology including but not limited to computer devices, network topology, software, and other hardware/physical assets.
24	**Executive Support**	Reporting capability to support executive decisions and monitor all business process areas including but not limited too; population management, resource management, financial, quality, incident reporting, contract management, productivity etc.

Appendix B: Application System Inventories

Application System Inventory - Field Definitions	
Column Name	**Description of Column Contents**
Application Short Name	The common or abbreviated application name.
Application Full Name	The full name of the application with description as appropriate.
App Type (COTS, Custom, Hybrid)	The application is primarily COTS, custom coded, or a hybrid.
X = Transaction Processing	An X indicates the system is used to record transactional information.
X = Information Access	An X indicates the system is used to communicate information, for example using lists or maps.
X = End-User / Group Productivity	An X indicates the system is used as a collaboration or group coordination tool.
X = Browser Delivery	An X indicates the system uses web browsers as the primary user interface.
Operating System & Platform	The OS and platform for operating the system.
Database	The database technology used by the system.
Language	The implementation language used by the system.
Data (Pers/PHI/FIN)	The system manages Personal, Health or Financial information.
Access Via (Inter/Intra/VPN)	Access to the system is via the Internet, Intranet or externally via VPN.
Scope (Bureau, Dept/Agency, Secretariat, Commonwealth)	The application's scope of use.
Year Installed	The year the system went live.
Number of IT Staff Assigned	The number of IT staff assigned, using fractional FTEs for part-time support.
Total Registered Users	The total number of end-users, indicating public access if appropriate.

(See next page for Inventory)

Application Short Name	Application Full Name	App Type (COTS, Custom, Hybrid)	X = Transaction Processing	X = Information Access	X = End-User / Group productivity	X = Browser Delivery	System Architecture = 2 Tier or 3 Tier	Operating System & Platform	Database	Language	Data (Pers /PHI/ FIN)	Access Via (Inter/ Intra/ VPN)	Scope: Bureau, Dept/Agency, Secretariat, Commonwealth	Year Installed	Number of IT Staff Assigned	Total Registered Users	Systems Interfaced to
MHIS	Mental Health Information System	COTS/ Customized	X	X	X			Windows Server 2003	Meditech C/S 5.5.5 - Proprietary	Proprietary	Pers/ PHI/ FIN		Agency	2000	20	~4000	MHIS DR, DMH Data Warehouse
CMS	Dept. of Mental Health Contract Management System	Custom	X	X		X	3 TIER	Windows 2003	SQL 2005	ASP	Pers/FIN	Intra	Agency	1999	1	50	
IA Real	Internal Affairs Case Management System	Custom	X	X			2 TIER	Windows 2003	SQL 2005	Visual Basic	PHI	Intra	Agency	1997	2	71	
CARE	Clinical Automated Record System for Southeast Area	Custom	X	X	X		2 TIER	Windows 2003	SQL 2005	MS Access	PHI	Intra	Agency	1995	2	400	
Licensing	Licensing	Custom	X	X	X		2 TIER	Windows 2003	SQL 2005	MS Access/SQL	Pers/PHI	Intra	Agency	2009	1	16	
Contract Monitoring/Performance Review	Contract Monitoring/Performance Review	Custom	X	X	X		2 TIER	Windows 2003	SQL 2005	MS Access	PHI	Intra	Agency	2010	1	100	
Legal BASE	Legal BASE	Custom	X	X	X		2 TIER	Windows 2003	Access 2003	MS Access	Pers/PHI	Intra	Agency	2011	1	24	
CUBP	CUBP/Rehab Tracking	Custom	X	X	X		2 TIER	Windows 2003	SQL 2005	MS Access	PHI	Intra	Agency	2002	1	45	
Firearms	Firearms	Custom	X	X			2 TIER	Windows 2003	SQL 2005	MS Access	PHI	Intra	Agency		1	4	
HOT	Homeless Outreach Team WebApp	Custom	X	X	X	X	3 TIER	Windows 2003	SQL 2005	VB.NET	PHI	Intra	Agency	2010	1	15	
Housing	Housing Inventory	Custom	X	X	X		2 TIER	Windows 2003	SQL 2005	MS Access		Intra	Agency		1	19	
Medication Occurrence/MAP	Medication Occurrence/MAP	Custom	X	X			2 TIER	Windows 2003	SQL 2005	Classic .ASP	PHI	Intra	Agency		1	4	
Campus Police Log	Campus Police Log	Custom	X	X	X	X	3 TIER	Windows 2003	SQL 2005	.NET	PHI	Intra	Agency	2010	1	31	
Replacement Units DB/Parkview	Replacement Units Database	Custom	X	X	X		2 Tier	Windows 2003	Access 2003	MS Access	PHI		Agency	1993	1	2	DMH Data Warehouse
DART	Referral Tracking System																
Restraints	Restraints & Seclusions Tracking																
DMH Outcomes	DMH Outcomes																
Inpatient Indicators	Inpatient Indicators																

Application Short Name	Application Full Name	App Type (COTS, Custom, Hybrid)	X = Transaction Processing	X = Information Access	X = End-User / Group productivity	X = Browser Delivery	System Architecture = 2 Tier or 3 Tier	Operating System & Platform	Database	Language	Data (Pers /PHI/ FIN)	Access Via (Inter/ Intra/ VPN)	Scope: Bureau, Dept/Agency, Secretariat, Commonwealth	Year Installed	Number of IT Staff Assigned	Total Registered Users	Systems Interfaced to
Psychopharm Indicators	Psychopharm Indicators																
DMH Outcome Reporting	DMH Outcome Reporting																
Consumer & Family Satisfaction Survey	Consumer & Family Satisfaction Survey																
DIG Grant Reporting	DIG Grant Reporting																
Solution Set Support, e.g. Reporting and Interfaces																	
NewMMIS Interfaces	NewMMIS Interfaces	Custom		X				Windows Server 2004	SQL 2005	.NET, C#	Pers/PHI		Agency/Secretariat	2009	1	N/A	DMH Data Warehouse, NewMMIS
MHIS Downtime Application	MHIS Downtime Application	Custom		X				Windows Server 2005	SQL 2005	VB6	Pers/PHI		Agency	~2004	1	~250	MHIS
MRS	Management Reporting System based on the Commonwealth Warehouse	Custom		X		X	3 TIER	Windows 2003	SQL 2005	XML/XSLT/Java Script	PHI/FIN	Intra	Agency	2004	2	130	
Meditech Data Repository	MHIS data in accessible form (available only through AIT)	Custom	X	X			2 Tier	Windows 2003	SQL 2005	Meditech Magic / C/S 5.54 (proprietary)	PHI		Agency	2001	3	5	Meditech
DMH Data Warehouse	MHIS and BoPHF Meditech and other data in accessible form	Custom	X	X	X		3 Tier	Windows 2003	SQL 2005	Transact SQL	PHI/FIN		Agency	2003	4	560	DMH & BoPHF MHIS, CIW,Park view
INFORM	Prepared reports using data from the DMH Warehouse	Custom	X	X	X		2 Tier	Windows 2003	Access 2003	MS Access	PHI		Agency	2004	3	420	DMH Data Warehouse
Discharge Planning & Placement	Discharge Planning & Placement																
CBFS Provider Data Submission	CBFS Provider Data Submission	Custom	X	X	X		2 Tier	Windows 2003	SQL 2005	Transact SQL	PHI		Agency	2009	4		DMH Data Warehouse & Meditech
CBFS Outcomes	CBFS Outcomes	Custom	X	X	X		2 Tier	Windows 2003	SQL 2005	Transact SQL	PHI		Agency	2010	4		DMH Data Warehouse
ORYX Reporting	ORYX Reporting																

Application Short Name	Application Full Name	App Type (COTS, Custom, Hybrid)	X = Transaction Processing	X = Information Access	X = End-User / Group productivity	X = Browser Delivery	System Architecture = 2 Tier or 3 Tier	Operating System & Platform	Database	Language	Data (Pers /PHI/ FIN)	Access Via (Inter/ Intra/ VPN)	Scope: Bureau, Dept/Agency, Secretariat, Commonwealth	Year Installed	Number of IT Staff Assigned	Total Registered Users	Systems Interfaced to
PDI	Provider Data Interface																
Forensic DBs	Forensic DBs																
						Non-DMH Systems											
CIW	Commonwealth Information Warehouse																
BoPHF Meditech	BoPHF Meditech																
BoPHF DR	BoPHF Meditech Data Repository																
EIM	Enterprise Invoice Management																
New MMARS	New MMARS	COTS / Customized	X	X	X	X	3 Tier		Netezza		Pers / FIN	intra	Commonwealth		n/a	n/a	EIM / CIW

Appendix C: Weighted Solution Sets

Key:
The application is a _____ support of the Solution Set:

A = Primary
B = Secondary
N = None Applicable

Application Short Name	Application Full Name	Service Determination	Registration, Intake, and Discharge	Service Coordination/Tracking	Scheduling	Care Planning and Treatment	Medical Record Management	Information Privacy and Security	Order Entry, Laboratory, and Pharmacy	Claims, Billing and Financial Processing	Service Delivery Data from Contracted Providers	Interagency Coordination for Shared Client Services	Manage Consumer Funds	Legal, Forensic, and Guardianship	Incident Management	Accreditation and Licensing	Provider Quality Management	Provider and Contractor Management and Procurement	Manage Policy and Goals	Establish and Manage Business Relationships	Executive Support
MHIS	Mental Health Information System	a	a	a	n	a	a	b	n	a	a	b	n	a	n	b	n	a	n	n	a
CMS	Dept. of Mental Health Contract Management System	n	n	b	n	n	n	n	n	b	n	n	n	n	n	n	n	a	n	n	a
IA Real	Internal Affairs Case Management System	n	n	n	n	n	n	n	n	n	n	n	n	n	a	n	n	n	n	n	a
CARE	Clinical Automated Record System for Southeast Area	a	a	a	a	a	a	b	n	n	n	b	n	n	n	n	n	n	n	n	a
Licensing	Licensing	n	n	n	n	n	n	n	n	n	n	n	n	n	n	a	n	n	n	n	n
Contract Monitoring/Performance Review	Contract Monitoring/Performance Review	n	n	b	n	b	n	n	n	n	n	a	n	n	n	n	a	n	n	n	a
Legal BASE	Legal BASE	n	n	n	n	n	n	n	n	n	n	n	n	a	n	n	n	n	n	n	n
CUBP	CUBP/Rehab Tracking		n	a	a	b	n	n	n	n	n	n	n	n	n	n	n	n	n	n	b
Firearms	Firearms	n	n	n	n	n	n	n	n	n	n	b	n	n	n	n	n	n	n	n	n

Application Short Name	Application Full Name	Solution Sets																		
		Service Determination	Registration, Intake, and Discharge	Service Coordination/Tracking	Scheduling	Care Planning and Treatment	Medical Record Management	Information Privacy and Security	Order Entry, Laboratory, and Pharmacy	Claims, Billing and Financial Processing	Service Delivery Data from Contracted Providers	Interagency Coordination for Shared Client Services	Manage Consumer Funds	Legal, Forensic, and Guardianship	Incident Management	Accreditation and Licensing	Provider Quality Management	Provider and Contractor Management and Procurement	Manage Policy and Goals	Establish and Manage Business Relationships	Executive Support
HOT	Homeless Outreach Team WebApp	n	n	a	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Housing	Housing Inventory	n	n	b	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Medication Occurrence/MAP	Medication Occurrence/MAP	n	n	n	n	n	n	n	n	n	n	n	n	n	a	n	a	n	n	n	b
Campus Police Log	Campus Police Log	n	n	b	n	n	n	n	n	n	n	n	n	n	a	n	n	n	n	n	n
Replacement Units DB/Parkview	Replacement Units Database	n	a	n	n	n	n	n	n	n	n	n	n	b	n	n	n	n	n	n	0
DART	DMH Admissions and Referral Tracking System	a	b	b	n	b	n	n	n	n	n	b	n	b	n	n	n	n	n	n	a
Restraints	Restraints & Seclusions Tracking	n	n	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n	n	a
DMH Outcomes	DMH Outcomes	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	a	n	n	n	a
Inpatient Indicators	Inpatient Indicators	n	n	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n	n	a
Psychopharm Indicators	Psychopharm Indicators	n	n	n	n	a	n	n	n	n	n	n	n	n	n	n	n	n	n	n	a
Discharge Planning & Placement	Discharge Planning & Placement	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	b
Consumer & Family Satisfaction Survey	Consumer & Family Satisfaction Survey	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	b	n	n	a

Application Short Name	Application Full Name	Service Determination	Registration, Intake, and Discharge	Service Coordination/Tracking	Scheduling	Care Planning and Treatment	Medical Record Management	Information Privacy and Security	Order Entry, Laboratory, and Pharmacy	Claims, Billing and Financial Processing	Service Delivery Data from Contracted Providers	Interagency Coordination for Shared Client Services	Manage Consumer Funds	Legal, Forensic, and Guardianship	Incident Management	Accreditation and Licensing	Provider Quality Management	Provider and Contractor Management and Procurement	Manage Policy and Goals	Establish and Manage Business Relationships	Executive Support
DIG Grant Reporting	Data Infrastructure Grant (DIG) Reporting	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	a
PDI	Provider Data Interface	a	a	a	n	b	n	n	n	a	a	n	n	n	n	n	b	n	n	n	b
Forensic DBs	Forensic DBs	n	n	n	n	n	n	n	n	n	a	a	n	a	n	n	n	n	n	n	a
User Maintained Spreadsheets	User Maintained Spreadsheets	b	a	a	a	a	b	b	b	b	a	b	a	a	a	b	a	a	n	n	b
User Maintained Access Apps.	User Maintained Access Apps.	b	a	n	a	a	n	b	n	n	n	n	a	n	b	n	b	a	n	n	b
Solution Set Support, e.g. Reporting and Interfaces																					
NewMMIS Interfaces	NewMMIS Interfaces	b	n	n	n	n	n	n	n	n	n	a	n	n	n	n	n	n	n	n	n
MHIS Downtime Application	MHIS Downtime Application	n	b	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
MRS	Management Reporting System based on the Commonwealth Warehouse	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	b	n	n	a
Meditech Data Repository	MHIS data in accessible form (available only through AIT)	b	b	b	n	b	b	n	n	b	b	n	n	b	n	n	n	n	n	n	b
DMH Data Warehouse	MHIS and BoPHF Meditech and other data in accessible form	b	b	b	n	b	b	b	n	a	b	a	n	b	b	b	b	b	n	n	b
INFORM	Prepared reports using data from the DMH Warehouse	a	a	a	n	a	a	a	n	a	a	a	n	a	n	n	a	b	n	n	a

Application Short Name	Application Full Name	Service Determination	Registration, Intake, and Discharge	Service Coordination/Tracking	Scheduling	Care Planning and Treatment	Medical Record Management	Information Privacy and Security	Order Entry, Laboratory, and Pharmacy	Claims, Billing and Financial Processing	Service Delivery Data from Contracted Providers	Interagency Coordination for Shared Client Services	Manage Consumer Funds	Legal, Forensic, and Guardianship	Incident Management	Accreditation and Licensing	Provider Quality Management	Provider and Contractor Management and Procurement	Manage Policy and Goals	Establish and Manage Business Relationships	Executive Support
											Solution Sets										
CBFS Provider Data	CBFS Provider Data	n	n	a	n	b	n	n	n	n	n	n	n	n	n	n	a	n	n	n	n
CBFS Outcomes	DMH Outcomes	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	a	n	n	n	a
ORYX Reporting	ORYX Reporting	n	n	n	n	n	b	n	n	n	n	n	n	n	n	a	n	n	n	n	n
DMH Outcome Reporting	DMH Outcomes	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	a	n	n	n	a
										Non-DMH Systems											
CIW	Commonwealth Information Warehouse	n	n	n	n	n	n	n	n	b	n	n	n	n	n	n	n	a	n	n	a
BoPHF Meditech	BoPHF Meditech	n	a	a	n	a	a	b	b	n	n	a	n	a	n	n	n	n	n	n	a
BoPHF DR	BoPHF Meditech Data Repository	b	b	b	n	b	b	n	n	b	b	n	n	b	n	n	n	n	n	n	b
EIM	Enterprise Invoice Management	n	n	b	n	n	n	n	n	a	a	n	n	n	n	n	n	n	n	n	n
New MMARS	New MMARS	n	n	n	n	n	n	n	n	a	n	n	n	n	n	n	n	a	n	n	a

Commonwealth of Massachusetts
Executive Office of Health and Human Services
Next Generation System Planning Project

Deliverable 4.4C (BoPHF): Final To-Be Technical Capability Matrix
(Based on MITA SS-A – Version 2.0)

February 14, 2012

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Deliverable 4.4C (BoPHF): Final To-Be
Technical Capability Matrix (TCM)

Table of Contents

1.0 Project Methodology/Results

1.1   Background

This "To-Be" Technical Capability Matrix (TCM) report builds upon the Activity 3 work that resulted in the production of the "As-Is" TCM report. The intent of this report is to address how the future or To-Be state of technology will mature in order to address the identified Business Capability Matrix (BCM) To-Be state. Approximately 43% of the Bureau of Public Health Facilities' (BoPHF) BCM As-Is business processes have been selected to mature by the BCM team. This report addresses the impact of that trajectory from a technical perspective and will assist BoPHF as it strives to improve the technical environment. Analogous to the As-Is report, this is a source document, that will become a key artifact in the planning, procurement and implementation of a next generation, MITA-compliant solution.

1.2   Project Approach

Consistent with the guiding principles of the project where "business drives technology", the BCM business processes are used as the catalysts to derive the future TCM maturity levels. This approach preserves the concept that the technical capabilities are enablers of business processes. With these principles in mind, the BerryDunn TCM team conducted the initial To-Be activity in collaboration with the BCM To-Be activity. The TCM team participated in the BCM meetings that were held during the week of January 23, 2012. Based on the resulting BCM To-Be business processes, the TCM team derived the TCM To-Be matrix. The TCM team held meetings with BoPHF during the week of February 6, 2012 to review the outcome of these business process drivers and the resulting technology implications and maturity concepts.

During the BCM As-Is activity, a consolidated list of 46 unique business processes were identified for BoPHF. Of the 46 business processes, 20 (43%) have been identified as targets for increases in maturity within the To-Be state. The BCM team used a combination of the MITA 2.0 goals/objectives, agency goals/needs, and agency recommendations to inform the selection of business processes to be systematically matured. These are the business processes that will be targeted for increases in automation, interoperability, and efficiency for the next generation solution. Specifically, the BCM team used the following six criteria in selecting the business processes to be matured:

1. Meets one or more MITA 2.0 Goals;
2. Meets one or more BoPHF Agency Goals;
3. Maturing the process improves a critical business function or functions;
4. Maturing the process will occur as a result of maturing another related or dependent process;
5. Maturing the process will allow other processes to mature as well; and
6. Can be matured over a two to five year horizon.

Consistent with the TCM As-Is model, this report utilizes Solution Sets as the "centerpiece" of the TCM To-Be model. Solution Sets are logical groupings of systems, applications, and tools that support specific business functions. 24 Solution Sets have been identified across EOHHS through the Next Generation Systems Planning Project. 20 of the 24 Solution Sets are

applicable to BoPHF as identified through the cross-walk to BoPHF BCM business processes (*Table 1*). This alignment provides a direct correlation between the underlying technologies and the business processes they support.

The TCM team cross-walked the 20 business processes to be matured against the 24 EOHHS Solution Sets to determine which Solution Sets will be directly impacted by the BCM To-Be state. This exercise, as expected, revealed that some Solution Sets were supporting one or more of the business processes identified as needing to mature and depicted that 16 unique Solution Sets are used in support of these 20 business processes.
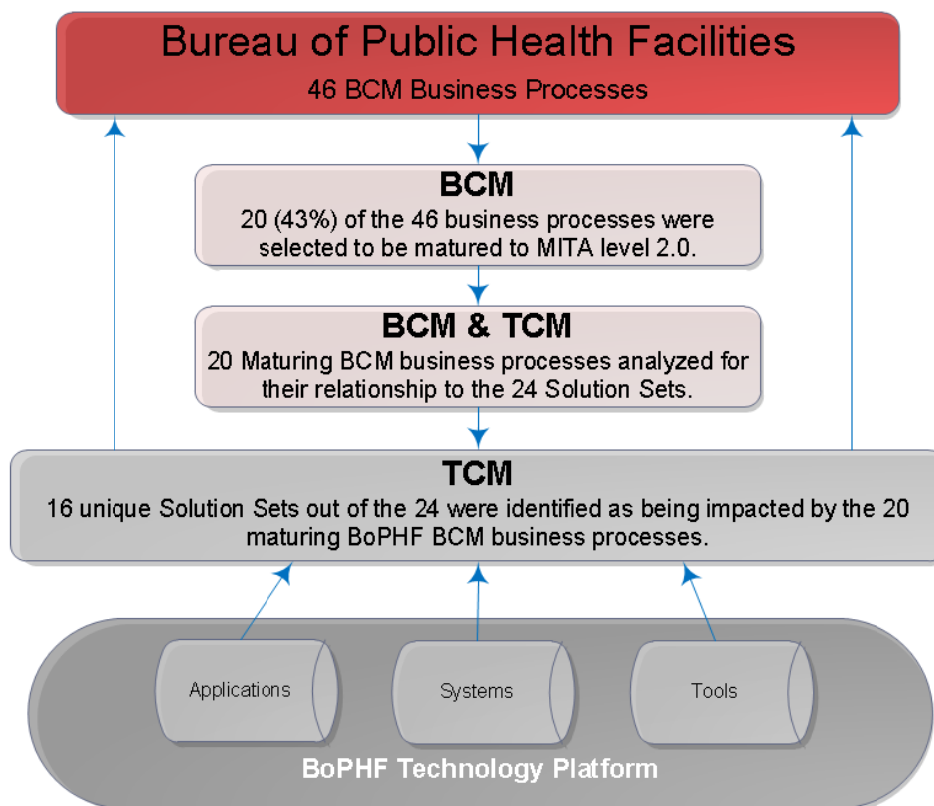
Figure 1: Maturing BCM business processes require enhancements to their Solution Sets.

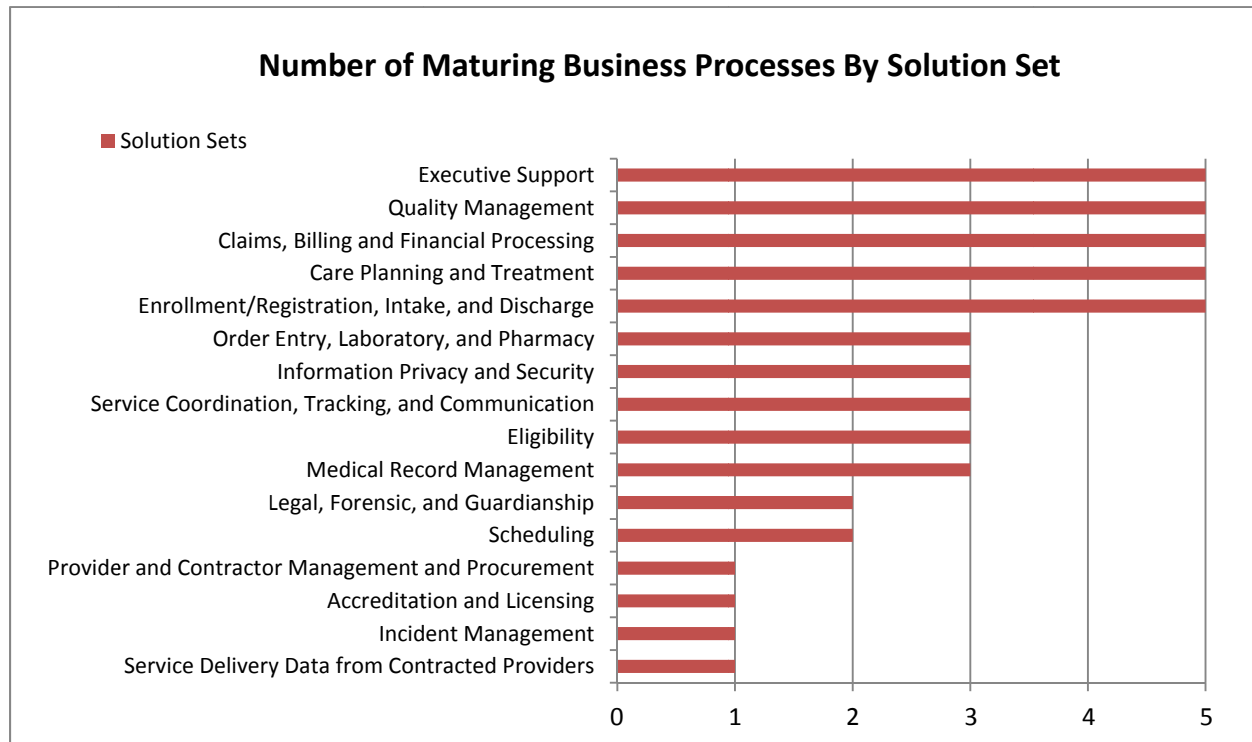The below table, *Table 1*, depicts all of the Solution Sets that support BoPHF' day-to-day business processes and efforts. Those BCM business processes that have been positioned to be matured are seen in bold. Business processes not in bold may still be enhanced and matured in the future, however, not selected as targets for the BCM To-Be activity. *Please see Appendix A for the full list of Solution Set definitions.*

*Items in **bold** are the 20 BCM processes that have been selected to be matured.*

#	Solution Sets	Related Business Processes
1	Service Determination	n/a
2	Eligibility	**7, 21, M1**
3	Enrollment/Registration, Intake, and Discharge	**15, 21, 22, 24, 26**, M2
4	Service Coordination, Tracking, and Communication	14, **25, 26, M51**
5	Scheduling	**31, 34**
6	Care Planning and Treatment	**23, 24, 25, 26, 27**
7	Medical Record Management	**7, 15**, **16/41**, 17, 20, **40**
8	Information Privacy and Security	14, **15**, **16/41**, 17, **40**
9	Order Entry, Laboratory, and Pharmacy	**25, 26, 27**
10	Claims, Billing and Financial Processing	**4, 7**, 29, 30, 32, **34, 37**, 38, 39, **40**, **M51**
11	Service Delivery Data from Contracted Providers	**40**
12	Interagency Coordination for Shared Client Services	9, 10, 11
13	Manage Consumer Funds	n/a
14	Legal, Forensic, and Guardianship	9, 14, **15**, **16/41**, 17, 20, 51
15	Incident Management	1, 2, **3**
16	Accreditation and Licensing	**6**, 8
17	Quality Management	1, 2, **3, 4, 5, 6**, 20, **27**, 28
18	Provider Performance Management	n/a
19	Provider and Contractor Management and Procurement	**27**, 43, 44, 45, 46, 47, 51
20	Program Management	n/a
21	Manage Policy and Goals	55
22	Establish and Manage Business Relationships	9, 10, 11
23	Infrastructure Support and IT	61, 62, 64
24	Executive Support	**3, 4, 5, 6**, 20, **25**, 29, 30, 38, 39, 55

Table 1: BoPHF Business Processes to TCM Solution Set Cross-walk.

The BCM and TCM cross-walking effort showcases that in some instances Solution Sets support more than one of the 20 identified business processes. Most notably, these include the Solution Sets Executive Support; Quality Management; Claims, Billing and Financial Processing; Care Planning and Treatment; and Enrollment/Registration, Intake and Discharge that each support five of the maturing business processes. In this way, these Solution Sets can be systematically organized by way of the business needs they support and overall BoPHF business process impact.

Number of Maturing Business Processes By Solution Set

■ Solution Sets

Category	Value
Executive Support	5
Quality Management	5
Claims, Billing and Financial Processing	5
Care Planning and Treatment	5
Enrollment/Registration, Intake, and Discharge	5
Order Entry, Laboratory, and Pharmacy	3
Information Privacy and Security	3
Service Coordination, Tracking, and Communication	3
Eligibility	3
Medical Record Management	3
Legal, Forensic, and Guardianship	2
Scheduling	2
Provider and Contractor Management and Procurement	1
Accreditation and Licensing	1
Incident Management	1
Service Delivery Data from Contracted Providers	1

Figure 2: BoPHF Solution Sets impacted by Maturing Business Processes.

The TCM team's effort to assess the impact and identify the target TCM To-Be state considered the As-Is scores of the 16 Solution Sets impacted by the To-Be business processes as well as their eight respective TCM sub-scores. Within the BCM context, the To-Be global and specific business process selection criteria were examined. Rationale for the business process selection as identified by the BCM team included the need for data integration capabilities, improved efficiencies, HIPAA standards compliance, enhanced reporting, increases in federal reimbursements and improved clinical data among others. In addition, each To-Be business process was examined at the BCM matrix level for respective technical details, e.g. interoperability, timeliness of process, data access and accuracy, effort to perform; efficiency and quality and accuracy of process results.

1.3 TCM To-Be Results

Based on the aforementioned approach, the TCM team has rationalized the TCM To-Be state that is depicted on the following page. As discussed above, the BCM To-Be rationale and matrix informed this impact assessment in order to derive the TCM To-Be state. Each TCM Solution Set impacted is targeted to advance to its correlating BCM To-Be state. While, the BCM and TCM matrices are not in comparison "apples to apples", their underlying attributes do suggest that in order to support each of the To-Be business processes at a 2.0 level, BoPHF will need the supporting Solution Sets to be at a 2.0 score as well.

It should also be mentioned, that the TCM team previously noted in the As-Is report that there were several under-served capabilities across Solution Sets that included: Access Channels, Interoperability, Flexibility/Adaptability and Extensibility. Based upon the technical architecture prevalent in the BoPHF environment, these scores were expectedly low. By addressing these core areas in the To-Be state, many of the Solution Sets, including those not specified to mature, will inherently advance above a 2.0 score as technologies that span across the BoPHF infrastructure are enhanced. Therefore, the 2.0 designation is a minimum expression of the To-Be state.

Technical Capability Matrix

16 Solution Sets Supporting Maturing BCM Processes	Eligibility		Enrollment/Registration, Intake, and Discharge		Service Coordination/Tracking and Communication		Scheduling		Care Planning and Treatment		Medical Record Management		Information Privacy and Security		Order Entry, Laboratory, and Pharmacy		Claims, Billing and Financial Processing		Service Delivery Data from Contracted Providers		Legal, Forensic, and Guardianship		Incident Management		Accreditation and Licensing		Quality Management		Provider and Contractor Management and Procurement		Executive Support	
	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be
B.0 Business Enabling Services	1.1	2.0	2.1	2.1	2.0	2.0	1.8	2.0	1.2	2.0	2.1	2.1	1.2	2.0	1.2	2.0	1.6	2.0	1.2	2.0	1.4	2.0	1.4	2.0	1.1	2.0	1.1	2.0	1.4	2.0	1.0	2.0
B.6 Decision Support	1.2	2.0	1.8	2.0	1.8	2.0	1.8	2.0	1.3	2.0	1.8	2.0	1.3	2.0	1.3	2.0	1.8	2.0	1.3	2.0	1.1	2.0	1.1	2.0	1.0	2.0	1.1	2.0	1.5	2.0	1.4	2.0
A.0 Access Channels	1.4	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0
I.0 Inter-operability	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.2	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0
D.0 Data Management and Sharing	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.1	2.0	1.0	2.0	1.2	2.0	1.5	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.3	2.0	1.3	2.0	1.0	2.0
P.0 Performance Measurement	1.0	2.0	1.5	2.0	1.4	2.0	1.4	2.0	1.2	2.0	1.5	2.0	1.0	2.0	1.2	2.0	1.5	2.0	1.2	2.0	1.0	2.0	1.5	2.0	1.0	2.0	1.5	2.0	1.0	2.0	1.3	2.0
S.0 Security and Privacy	2.1	2.1	1.9	2.0	1.9	2.0	1.7	2.0	1.6	2.0	1.9	2.0	1.8	2.0	1.6	2.0	1.7	2.0	1.6	2.0	1.4	2.0	1.4	2.0	1.4	2.0	1.4	2.0	1.7	2.0	1.4	2.0
F.0 Flexibility –Adaptability and Extensibility	1.1	2.0	1.1	2.0	1.1	2.0	1.1	2.0	1.1	2.0	1.1	2.0	1.0	2.0	1.1	2.0	1.1	2.0	1.1	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0	1.0	2.0
Solution Set Average	**1.2**	**2.0**	**1.4**	**2.0**	**1.4**	**2.0**	**1.4**	**2.0**	**1.2**	**2.0**	**1.4**	**2.0**	**1.2**	**2.0**	**1.2**	**2.0**	**1.4**	**2.0**	**1.2**	**2.0**	**1.1**	**2.0**	**1.2**	**2.0**	**1.1**	**2.0**	**1.2**	**2.0**	**1.2**	**2.0**	**1.1**	**2.0**

Table 2: As-Is and To-Be of the Solution Sets that support the To-Be BCM.

Below are Solution Sets not impacted by the BCM To-Be that will remain at their current levels as defined in the As-Is report.

Solution Sets	Interagency Coordination for Shared Client Services	Manage Consumer Funds	Manage Policy and Goals	Establish and Manage Business Relationships	Infrastructure Support and IT
Technical Capability Matrix					
	As-Is	As-Is	As-Is	As-Is	As-Is
B.0 Business Enabling Services	1.2	1.4	1.4	1.4	1.0
B.6 Decision Support	1.3	1.1	1.0	1.5	1.0
A.0 Access Channels	1.0	1.0	1.0	1.0	1.0
I.0 Interoperability	1.0	1.0	1.0	1.0	1.0
D.0 Data Management and Sharing	1.2	1.0	1.5	1.3	1.0
P.0 Performance Measurement	1.2	1.0	1.0	1.0	1.0
S.0 Security and Privacy	1.6	1.4	1.5	1.7	1.4
F.0 Flexibility – Adaptability and Extensibility	1.1	1.1	1.1	1.0	1.0
Solution Set Average	**1.2**	**1.1**	**1.2**	**1.2**	**1.1**

Table 3: Solution Sets not impacted by the BCM To-Be remain at their Current Maturity Levels.

2.0 Recommendations

Although the view into the BoPHF TCM is focused upon the relevant Solution Sets that are impacted by the maturing business processes, this report serves as the baseline TCM To-Be of the Next Generation Systems Planning Project. Review of the low scoring technical attributes in the As-Is TCM report should continue to be addressed going forward. Furthermore, replacing and/or improving technical areas in the targeted To-Be Solution Sets will inherently advance other Solution Sets in many cases.

As the targeted To-Be Solution Sets are reviewed, Appendix C, *"Weighted Solution Sets",* will provide the complete picture of BoPHF impact as it depicts all the Applications, Systems, Tools, and other technology that comprise the entire 24 EOHHS Solution Sets. Then, at the most granular level, *Appendix B, "Application System Inventories"* identifies all the supporting sub-technologies such as databases, operating systems and application languages within the BoPHF technology platform including their specific support for the Solution Set.

With these detailed technology maps available, the BoPHF technology environment can be comprehensively understood, communicated, and scaled in order to support these maturing business processes and technologies in the future. This level of precision enforces the BCM business processes to be correlated to the underlying technologies that directly support them. This approach promotes maintenance of the established alignment so that any gaps between the current state and future state can be objectively addressed.

This understanding of the BoPHF technology environment is a key artifact to consider as future requirements are gathered and the vendor community is informed of both the technology environment in place at BoPHF today and the desired To-Be state.

Lastly, the BoPHF members of the TCM team have been extremely capable, collaborative, experienced and knowledgeable of both the business and technical environments. From an enterprise perspective, the other participating departments, DDS and DMH, while unique, do share similar characteristics including their technical environments. This continues to appear promising as it may be valuable to share planning and technology assets, services and resources on this path to the future.

Appendix A: Enterprise Technology Solution Set Definitions

The 24 Enterprise Technology Solution Set Definitions

#	Solution Set Name	Functional Summary
1	Service Determination	Determine appropriateness for services; determine what services are needed and if they are available.
2	Eligibility	Determine eligibility, manage disallowances, manage all eligibility communications, manage all waivers, grievances and appeals related to eligibility. Manage program wait lists.
3	Enrollment/Registration, Intake, and Discharge	Intake screening, registration and admission, suspend/dis-enroll/discharge, track program capacity and censuses, and manage demographic data.
4	Service, Coordination/Tracking, and Communication	Coordination of care delivery, communication protocols, patient/client communication, coordination of discharge services and follow up care, referral authorization management, manage individual service prioritization, manage individual allocations and service budgets, manage waitlists for programs, and manage individual transportation information.
5	Scheduling	Manage staff scheduling, manage timekeeping and payroll, patient scheduling, resource scheduling, and group scheduling.
6	Care Planning and Treatment	Initial screening and assessment, treatment planning. Complete documentation of patient care using federal and state criteria, rules, best practices and professional judgment. Coordination of care delivery, discharge planning, managing patient outcomes, develops and manages individual service plans. Evaluate and document patient risk, restraint documentation and reporting of all patient care data as needed.
7	Medical Record Management	Management of all patient data in the health care record, collection and storage of client data, respond to consent decrees, manage patient/client grievances and appeals, manage request for protected health information both electronic and non electronic. Reviews and ensures data quality and completeness.
8	Information Privacy and Security	Manage compliance to privacy, security and confidentiality standards and regulations. Secure communications to meet confidentiality and legal requirements, security audits. Access based on role and level of authorization. Ensures all health information is protected.
9	Order Entry, Laboratory, and Pharmacy	Manage order entry, manage laboratory, and manage pharmacy services.
10	Claims, Billing and Financial Processing	Fiscal monitoring of patient/client, contractor services, program financial management, management position control, recruitment, accounting, 1099's, payroll, purchasing, accounts payable, revenue cycle, reimbursement, budget management and formulation, claims generation, auditing, mass adjustment, inquire payment status, manage recoupment, collections and recovery, authorize referrals and service, manage state fund, manage client specific service funds, generate financial and program analysis.
11	Service Delivery Data from Contracted Providers	Track patient data from contracted providers about quantity, type of service, delivered to individuals or groups storage of health care information.
12	Interagency Coordination for Shared Client Services	Create and manage business relationships, and engage in joint planning. Cross agency communication of patient information including sharing of aggregate data for the purpose of utilization management and performance monitoring.
13	Manage Consumer Funds	Manage individual patient funds not related to treatment.

#	Solution Set Name	Functional Summary
14	Legal, Forensic, and Guardianship	Document patient/client legal status, duty to warn, Roger's orders, forensic and guardianship data. Manage ongoing and potential legal cases/actions. Document and track risk evaluations. Coordinate and liaise with investigating agencies. Manage provider contracts. Manage client information policy. Respond to consent decrees. Manage patient grievance and appeals process.
15	Incident Management	Initiate and manage case and event reporting. Manage incident reporting. Manage medication occurrence reporting. Provide reporting on all incident types (including medication, restraint and other types).
16	Accreditation and Licensing	Manage program/providers surveys and certification. Manage accreditation and credentialing necessary for program participation. Monitor performance utilizing measures for accreditation and credentialing. Manage licensing of contracted providers.
17	Quality Management	Manage waiver programs provider qualifications, ensure program compliance as agreed upon with Medicaid, manage monitoring of national core indicators and performance measures, manage/monitor provider quality performance and compliance with standards. Conduct routine fiscal and clinical monitoring of patient outcomes and expenditures from a quality standpoint. Initiate, and manage case or event and subsequent incident reporting. Manage grievance and appeals process. Help to identify areas for improvement so preventive activities can be conducted. Perform contractor/provider outreach and training to ensure quality standards are defined. Allow for quality reporting.
18	Provider Performance Management	Establish mechanisms and requirements for developing, managing, and reporting performance measures, quality, outcomes, and other data for providers/ contractors to comply with agency, state, and federal reporting requirements. Analyze patient/client and service histories and trends, costs, and expenditures; assess external factors affecting the program; assess agency initiatives and plans; identify significant measurable activities and outcomes, and create and/or revise performance measures. Conduct and analyze client survey.
19	Provider and Contractor Management and Procurement	Manage provider/contractor procurement, awarding contracts, develop contracts, register providers/contractor, manage provider/contractor information, and close out contracts. Manage provider/contractor communications and grievance and appeals process, provide training and perform audits. Address requests for contractor/provider information. Monitor patient outcomes. Provide a provider listing of available providers to deliver services in support of participant direction. Manage transportation providers. Track participant driven budget. Manage budget billing and reimbursement for provider contracts.
20	Program Management	Manage all program individual waiver communications. Track waiver program capacities, provision and management of waiver assurances, manage individual program budgets, and manage program information. Maintain accurate tracking of housing capacity. Perform population and individual outreach.
21	Manage Policy and Goals	Develop and maintain program policy, agency goals and initiatives. Maintain state plan.
22	Establish and Manage Business Relationships	Create and manage business relationships, facilitate communication with business relationships. Engage in joint planning to coordinate efforts and programs between agencies. Develop and maintain program policy and agency goals. Terminate business relationships.
23	Infrastructure and IT	Manage information with respect to infrastructure and information technology including but not limited to computer devices, network topology, software, and other hardware/physical assets.
24	Executive Support	Reporting capability to support executive decisions and monitor all business process areas including but not limited too; population management, resource management, financial, quality, incident reporting, contract management, productivity etc.

Appendix B: Application System Inventories

Application System Inventory - Field Definitions	
Column Header Name	**Description of Column Contents**
Application Full Name	The full name of the application with description as appropriate.
App Type (COTS, Custom, Hybrid)	The application is primarily COTS, custom coded, or a hybrid.
X = Transaction Processing	An X indicates the system is used to record transactional information.
X = Information Access	An X indicates the system is used to communicate information, for example using lists or maps.
X = End-User / Group Productivity	An X indicates the system is used as a collaboration or group coordination tool.
X = Browser Delivery	An X indicates the system uses web browsers as the primary user interface.
Operating System & Platform	The OS and platform for operating the system.
Database	The database technology used by the system.
Language	The implementation language used by the system.
Data (Pers/PHI/FIN)	The system manages Personal, Health or Financial information.
Access Via (Inter/Intra/VPN)	Access to the system is via the Internet, Intranet or externally via VPN.
Scope (Bureau, Dept/Agency, Secretariat, Commonwealth)	The application's scope of use.
Year Installed	The year the system went live.
Number of IT Staff Assigned	The number of IT staff assigned, using fractional FTEs for part-time support.
Total Registered Users	The total number of end-users, indicating public access if appropriate.

Application Short Name	Application Full Name	App Type (COTS, Custom, Hybrid)	X = Transaction Processing	X = Information Access	X = End-User / Group productivity	X = Browser Delivery	System Architecture = 2 Tier or 3 Tier	Operating System & Platform	Database	Language	Data (Pers /PHI/ FIN)	Access Via (Inter/ Intra/ VPN)	Scope: Bureau, Dept/Agency, Secretariat, Commonwealth	Year Installed	Number of IT Staff Assigned	Total Registered Users	Systems Interfaced to
Summit Software	Scheduling software enabling the scheduling of printed Meditech reports. Software used exclusively for the Meditech System.	COTS			X		1	Windows XP Professional	Access 2003	Access			Bureau	2007	3	3	Meditech
Interbit (Auto Fax) - Active Fax	Softare enabling the faxing of Meditech reports and results via PC. Software used exclusively with Meditech.	COTS			X		1	Windows 2003	SQL	SQL			Bureau	2007	3	unlimited	Network/Meditech
Meditech	Electronic medical record and billing system	COTS	X	X	X	X	3	Windows 2003	Magic	Magic	X	X	Bureau	2002	12	2,500	SFED/PACS/UMASS
Policy Tech	Policy & Procedure Management Software	COTS		X	X	X	1	Windows	?			X	Hospitals	2010	1	All staff at WMH and LSH	
Carestream Health	PACS TKH	COTS	X	X	X	X	1	Windows	Oracle		X	X	Hospitals	2010	2	50	Meditech
Infinitt Photographic Archiving Computer System	PACS LSH	COTS	X	X	X	X	1	Windows	?		X	X	Hospitals	2010	2	200	Meditech
Abbott Blood Glucose System	Glucose Monitoring System	COTS	X		X		1	Windows	?		X	X	Hospitals	2009	1	??	Meditech
Stellate Harmonie EEG System	Stellate Harmonie EEG System	COTS	X	X	X		1		?				Hospitals			??	
Phillips Trace Master VUE (EKG)	Phillips Trace Master VUE (EKG)	COTS	X	x	X		1						Hospitals			??	
Intranet / Web	Intranet / Web			X	X	X	1	Windows				X	Bureau		Desktop Engineers at each Site	All Network Uses at Sites	
Occurrence Databases - Misc. Access DB		Custom	X	X	X		1	Windows				X	Hospitals		Desktop Engineers at each Site	??	
Misc. Spreadsheets		Custom	X	X	X		1	Windows				X	Hospitals		Desktop Engineers at each Site	??	

Application Short Name	Application Full Name	App Type (COTS, Custom, Hybrid)	X = Transaction Processing	X = Information Access	X = End-User / Group productivity	X = Browser Delivery	System Architecture = 2 Tier or 3 Tier	Operating System & Platform	Database	Language	Data (Pers /PHI/ FIN)	Access Via (Inter/ Intra/ VPN)	Scope: Bureau, Dept/Agency, Secretariat, Commonwealth	Year Installed	Number of IT Staff Assigned	Total Registered Users	Systems Interfaced to
Shared files/folders on networks being used for various patient related documentation		Custom	X	X	X		1	Windows			X		Hospitals		Desktop Engineers at each Site	??	
Nurse call System	Nurse Call System	COTS			X		1	Windows					Hospitals			??	
Intranet to access word documents for Menu Tracking	??	Custom			X	X	1	Windows				X	Hospitals		Desktop Engineers at each Site	??	
Geri Menu	Dietary Management Software	COTS	X	X	X		1	Windows			X		Hospitals		Desktop Engineers at each Site	??	
All Write Transcription Services - WMH	Vendor	COTS	X	X	X		1	Windows			X	X	Hospitals	2009	2	6	Meditech/SFED
Medquist Transcription Services - LSH	Vendor	COTS	X	X	X		1	Windows			X	X	Hospitals	2004	2	Clinical Staff at LSH	Meditech/SFED
In-house Transcription	??	COTS	X	X	X		1	Windows			X		Hospitals		Desktop Engineers at each Site	??	
FormFast	Form Management Software	COTS			X		1	Windows					Hospitals	2003	2	2	Meditech
Business Intelligence DB	SQL	COTS	X	X	X		2	Windows			X		Bureau	2009	3	25	Meditech
Pyxis	Medication Distribution System	COTS	X		X		1	Windows			X	X	Hospitals	2011		??	
SOPS - PIS	Pharmacy	COTS	X	X	X		1	Windows			X		Agency			??	
Citrix	Citrix	COTS			X	X	2	Windows 2003				X	Hospitals	2008	2	2500	Meditech
IVANS	CMS Communications Protocol	COTS	X		X		1	Windows				X	Agency	2009	Desktop Engineers at each Site	25	
NewMMIS	Medicaid Management Information System	Custom	X	X	X	X	2	Windows			X	X	Commonwealth			??	
MMARS/BAR	State Accounting Applications	Custom	X	X	X	X	2	Windows			X	X	Commonwealth			??	
HRCMS	State Payroll System	COTS	X	X	X	X	2	Windows			X	X	Commonwealth			??	
CAMIS	Facility Management Software	COTS	X	X	X	X	1	Windows			X	X	Commonwealth			??	

Application Short Name	Application Full Name	App Type (COTS, Custom, Hybrid)	X = Transaction Processing	X = Information Access	X = End-User / Group productivity	X = Browser Delivery	System Architecture = 2 Tier or 3 Tier	Operating System & Platform	Database	Language	Data (Pers /PHI/ FIN)	Access Via (Inter/ Intra/ VPN)	Scope: Bureau, Dept/Agency, Secretariat, Commonwealth	Year Installed	Number of IT Staff Assigned	Total Registered Users	Systems Interfaced to
BoPHF Datawarehouse	SQL	Custom		X	X		1	Windows			X	X	Commonwealth			??	
Quest Labs	Reference Lab (for MHS)	COTS	X	X	X	X	2	Windows			X	X	Hospitals	2011	2	15	

Appendix C: Weighted Solution Sets

Key:
The application is a _____ support of the Solution Set:

A = Primary
B = Secondary
N = None Applicable

Application Short Name	Application Full Name	Eligibility	Enrollment/Registration, Intake, and Discharge	Service Coordination/Tracking and Communication	Scheduling	Care Planning and Treatment	Medical Record Management	Information Privacy and Security	Order Entry, Laboratory, and Pharmacy	Claims, Billing and Financial Processing	Service Delivery Data from Contracted Providers	Interagency Coordination for Shared Client Services	Manage Consumer Funds	Legal, Forensic, and Guardianship	Incident Management	Accreditation and Licensing	Quality Management	Provider and Contractor Management and Procurement	Manage Policy and Goals	Establish and Manage Business Relationships	Infrastructure Support and IT	Executive Support
MEDITECH	TKH, LSH, WMH, MHS	n	a	a	a	a	a	a	a	a	a	b	a	a	n	n	n	n	n	n	n	b
Policy Tech	WMH, LSH	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	a	n	n	n
Carestream Health	PACS for TKH	n	n	n	n	b	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n
Infinitt Photographic Archiving Computer System	PACS for LSH	n	n	n	n	b	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n
Abbott Blood Glucose System	LSH, TKH	n	n	n	n	b	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n
Stellate Harmonie EEG System	LSH	n	n	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Phillips Trace Master VUE (EKG)	LSH, TKH	n	n	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Intranet / Web	MHS, MHS	n	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n	a	n	n	n

Application Short Name	Application Full Name	Eligibility	Enrollment/Registration, Intake, and Discharge	Service Coordination/Tracking and Communication	Scheduling	Care Planning and Treatment	Medical Record Management	Information Privacy and Security	Order Entry, Laboratory, and Pharmacy	Claims, Billing and Financial Processing	Service Delivery Data from Contracted Providers	Interagency Coordination for Shared Client Services	Manage Consumer Funds	Legal, Forensic, and Guardianship	Incident Management	Accreditation and Licensing	Quality Management	Provider and Contractor Management and Procurement	Manage Policy and Goals	Establish and Manage Business Relationships	Infrastructure Support and IT	Executive Support
Occurrence Databases - Misc. Access DB	TKH, LSH, WMH, MHS	n	n	n	n	n	n	n	b	n	n	b	n	b	a	b	b	n	b	n	n	b
Misc. Spreadsheets	TKH, LSH, WMH, MHS	n	n	n	n	n	n		n	b	n	n	b	b	b	n	a	n	n	n	b	b
Shared files/folders on networks being used for various patient related documentation	TKH, LSH, WMH, MHS	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b
Nurse call System	TKH, LSH, WMH, MHS	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	b	n	n	n	n	n
Intranet to access word documents for Menu Tracking	WHM	n	n	b	b	b	n	n	n	n	n	n	n	n	n	n	b	n	n	n	n	n
Gerry Menu	MHS, TKH	n	n	b	b	b	n	n	b	n	n	b	n	n	n	n	b	n	n	n	n	n
All Write Transcription Services - WMH	WMH	n	n	n	n	b	b	n	b	n	n	n	n	n	n	n	b	n	n	n	n	n
Medquist Transcription Services - LSH	LSH	n	n	n	n	b	b	n	b	n	n	n	n	n	n	n	b	n	n	n	n	n

Application Short Name	Application Full Name	Solution Sets																			
		Eligibility	Enrollment/Registration, Intake, and Discharge	Service Coordination/Tracking and Communication	Scheduling	Care Planning and Treatment	Medical Record Management	Information Privacy and Security	Order Entry, Laboratory, and Pharmacy	Claims, Billing and Financial Processing	Service Delivery Data from Contracted Providers	Interagency Coordination for Shared Client Services	Manage Consumer Funds	Legal, Forensic, and Guardianship	Incident Management	Accreditation and Licensing	Quality Management	Provider and Contractor Management and Procurement	Manage Policy and Goals	Establish and Manage Business Relationships	Infrastructure Support and IT	Executive Support
In-house Transcription	MHS	n	n	n	n	b	b	n	b	n	n	n	n	n	n	n	b	n	n	n	n	n
In-house Transcription	TKH	n	n	n	n	b	b	n	b	n	n	n	n	n	n	n	b	n	n	n	n	n
FormFast	LSH, TKH, WMH, MHS	n	b	n	n	n	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n
Falls, PCA, Environment of care	WMH databases	n	n	n	n	b	n	n	b	b	n	n	n	n	b	n	b	n	n	n	n	n
Solution Set Support, e.g. Reporting and Interfaces																						
Business Intelligence DB	TKH, LSH, WMH, MHS	n	n	n	n	b	a	a	b	b	n	n	n	b	n	n	b	n	n	n	n	b
Summit Software	TKH, LSH, WMH, MHS	n	n	b	b	b	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
AutoFax/ActiveFax	LSH and MHS	n	n	b	b	b	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n
Pyxis	TKH and LSH	n	n	n	n	b	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n
SOPS - PIS	Pharmacy interface for hospitals (Including DMH)	n	n	n	n	b	n	n	b	n	n	n	n	n	b	n	n	n	n	n	n	n
Citrix	Citrix	n	n	n	n	n	n	a	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Non-BoPHF Systems																						
Sidexis XG Dental	WMH and NO data exchanged	n	n	n	n	b	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n	n

Application Short Name	Application Full Name	Solution Sets																				
		Eligibility	Enrollment/Registration, Intake, and Discharge	Service Coordination/Tracking and Communication	Scheduling	Care Planning and Treatment	Medical Record Management	Information Privacy and Security	Order Entry, Laboratory, and Pharmacy	Claims, Billing and Financial Processing	Service Delivery Data from Contracted Providers	Interagency Coordination for Shared Client Services	Manage Consumer Funds	Legal, Forensic, and Guardianship	Incident Management	Accreditation and Licensing	Quality Management	Provider and Contractor Management and Procurement	Manage Policy and Goals	Establish and Manage Business Relationships	Infrastructure Support and IT	Executive Support
IVANS	VPN Interface used for Medicare claims processes (TKH, LSH, WMH)	n	n	n	n	n	n	n	n	b	n	n	n	n	n	n	n	n	n	n	n	n
NewMMIS	TKH, LSH, WMH, MHS	b	n	b	n	n	n	n	n	b	n	b	n	b	n	n	n	n	n	n	n	n
MMARS/BAR	TKH, LSH, WMH, MHS	n	n	n	n	n	n	n	n	b	n	b	n	n	n	n	n	a	n	b	b	b
HRCMS	TKH, LSH, WMH, MHS	n	n	n	n	n	n	n	n	b	n	n	n	n	n	n	n	n	n	n	n	b
CAMIS	TKH, LSH, WMH, MHS	n	n	n	n	n	n	n	n	b	n	n	n	n	n	n	n	n	n	n	n	b
BoPHF Data warehouse	TKH, LSH, WMH, MHS	n	n	n	n	n	n	n	n	b	n	b	n	n	n	n	n	a	n	b	b	b
Quest Labs	MHS Reference Lab	n	n	n	n	b	n	n	b	n	b	n	n	n	n	n	n	n	n	n	n	n